PHOTO-ERA THE AMERICAN JOURNAL OF PHOTOGRAPHY

VOL. XVI **JUNE, 1906** **No. 6**

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Entered at Post Office, Boston, as second-class matter

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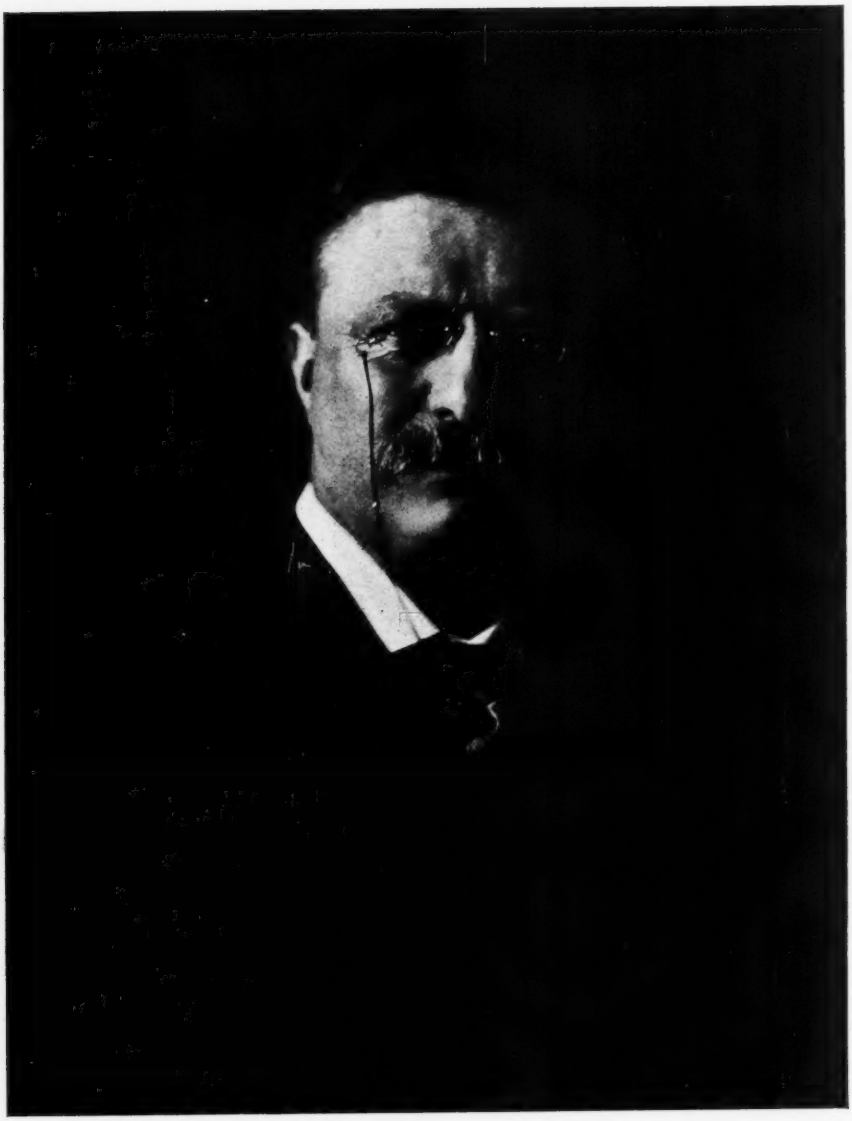


E. S. CURTIS
THEODORE ROOSEVELT
PRESIDENT OF THE UNITED STATES

PHOTO - ERA

The American Journal of Photography

VOL. XVI JUNE, 1906 No. 6

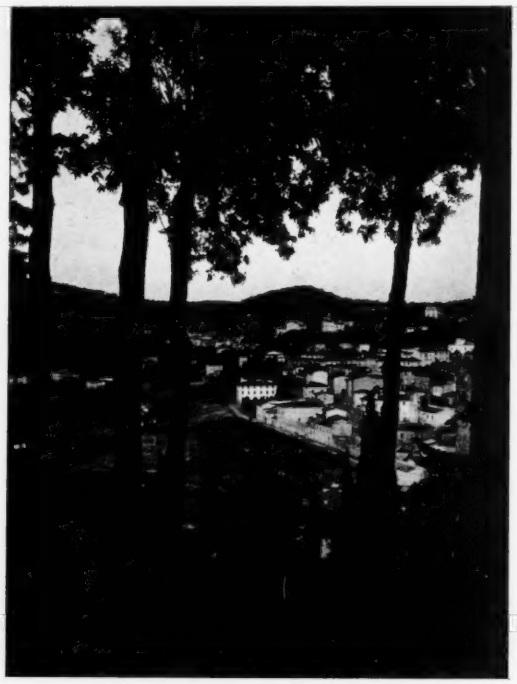
F. L. OLMSTED, JR. HARVARD CAMERA CLUB
ARCHITECTURAL DETAIL STUDY—A VENETIAN ENTRANCE

THE INTERCOLLEGIATE EXHIBITIONS

MALCOLM DEAN MILLER, M. D.

President Harvard Camera Club, 1903–1905

WHEN, in the fall of 1900, the many vague plans for sometime having an Intercollegiate Exhibition between the camera clubs of the leading American Universities first took definite shape with the acceptance by Pennsy of the challenge of the Harvard Camera Club, the editor of PHOTO-ERA was one of the most interested helpers. This interest, with many practical demonstrations of its power to further the project, has been steadily maintained, so that to-day, when the Exhibition is entering a new and greatly enlarged field, it is to PHOTO-ERA that we



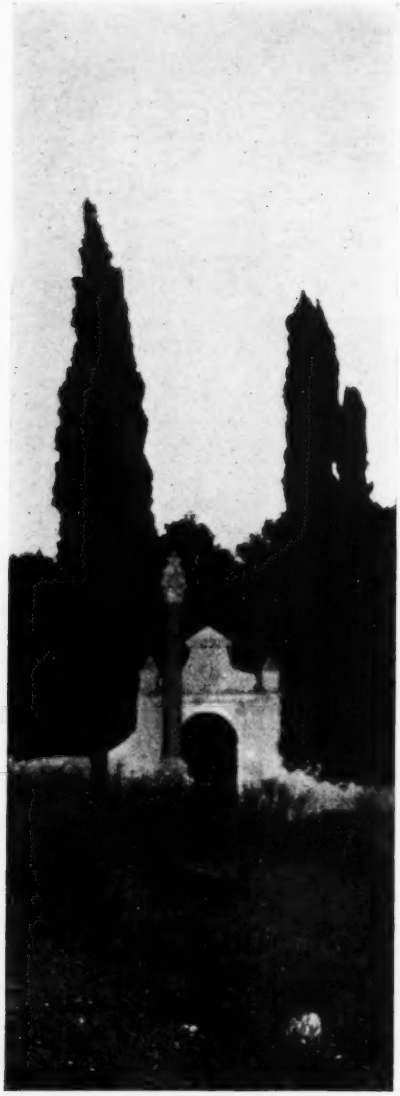
GEO. W. OUTERBRIDGE, HARVARD FIESOLE
HONORABLE MENTION, INTERCOLLEGIATE EXHIBITION, 1904

naturally turn in order to gain the attention of the photographic world. For we stand to-day, thanks to Mr. Cummings, in a position to demand a share of public consideration, with a permanent organization effected and the future holding out a prospect of at least six or eight universities annually taking part in the event. Many attempts had been made to induce other colleges than Harvard and Pennsy to come in, but always without success until Mr. Fleisher, the President of the Camera Club of the University of Pennsylvania, acting with the help of PHOTO-ERA, succeeded in bringing Dartmouth and Wisconsin into this year's Exhibition and secured the ratification of a constitution for perpetuating the machinery necessary for successful working. Thus to Harvard belongs the honor of having originated and to Pennsy of extending the movement.

The Harvard Camera Club in the college year 1900–1901 was fortunate in having a compact body of members who were all enthusiastic and expert photographers, a strong club spirit and the heritage of two remarkably successful years under the inspiring leadership of Walter Babcock Swift. Himself a pupil of H. P. Robinson and an earnest worker, he had the happy faculty of bringing

LAYTON B. REGISTER, PENNSYLVANIA LOTUS
HONORABLE MENTION, INTERCOLLEGIATE EXHIBITION, 1904

out the best that each member had to offer in the way of pictures, and in helping beginners to realize and make use of their powers. Before an exhibition he was indefatigable, visiting each man in turn and helping him to select and prepare his pictures. No one was allowed to say he had nothing fit to show, for Swift would make him bring out his negatives and spend an evening instructing him in printing, trimming, mounting or whatever was necessary to make promising material fulfil its promise. Naturally such methods bore fruit, and when he resigned the presidential chair to Frederic Bonnet, Jr., there was a splendid organization for the latter to use. Under Mr. Bonnet prosperity continued unabated and the challenge to Pennsy was sent and accepted.



F. L. OLMSTED, JR., HARVARD
WHERE THE DEAD OF A DEAD PAST LIE
SECOND PRIZE, INTERCOLLEGIATE EXHIBITION, 1903

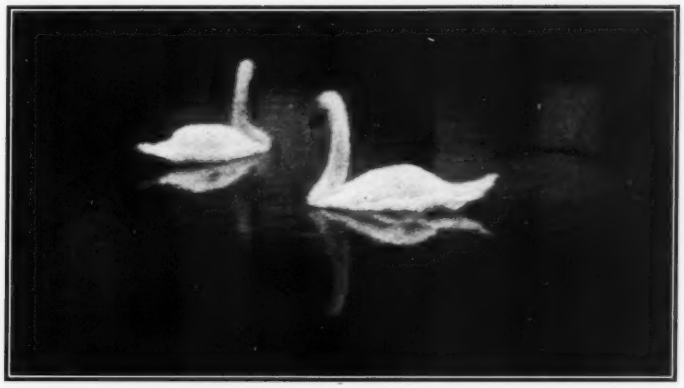
F. L. RICHARDSON, HARVARD
IN THE ICE FLOE
HONORABLE MENTION, INTERCOLLEGIATE EXHIBITION, 1904

HERBERT S. WELSH, HARVARD — A DUTCH COURTSHIP
HONORABLE MENTION, INTERCOLLEGIATE EXHIBITION, 1903

The First Intercollegiate Photographic Exhibition took place in May, 1901. Each club appointed two men as a committee to manage affairs, and these men drew up a rather strict set of rules and appointed three judges in the neutral territory of New York. Fifty pictures from each participant were sent to them for awards, and exhibited first at Philadelphia under the auspices of the Photographic Society of Philadelphia and later at Cambridge in the new Phillips Brooks House. The jury consisted of Mrs. Gertrude Kæsabier, Alfred Stieglitz and George G. Rockwood. Their decisions brought joy to Harvard and such woe to Pennsy that the contest, which had begun with a catalogue stating that it was the "First Annual," was omitted the following year owing to lack of interest in the Quaker City. All the awards, five in number, came to Cambridge. Harvard won the contest, receiving from the three judges a certificate that her fifty pictures were more artistic than Pennsy's. First prize for the best individual picture was awarded to Hiram Hall Rustin for a landscape entitled "Morning" which was reproduced in the catalogue, as well as one of the two Honorable Mentions for a picture of sheep. Mr. Bonnet took second with his "Hemlock Gorge" and the remaining mention went to Henry Ware Eliot, Jr. Although two thousand catalogues were published the attendance at the exhibition was sufficient to ex-

HIRAM HALL RUSTIN, HARVARD
MORNING
First Prize, Intercollegiate Exhibition, 1901

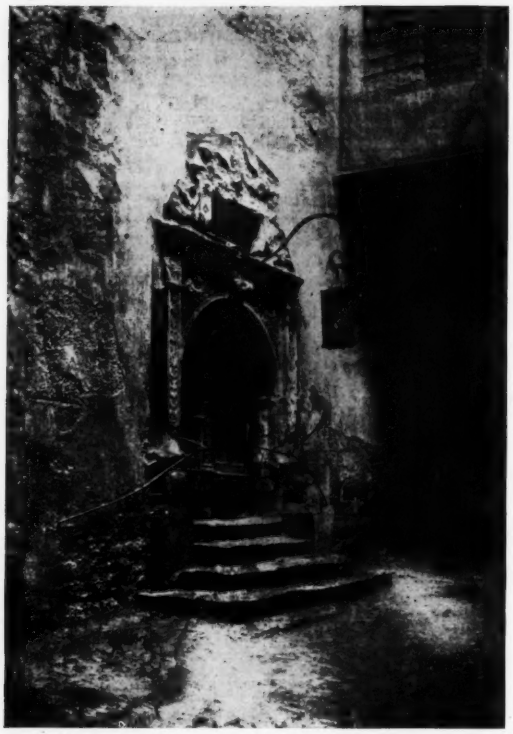
THOMAS W. SEARS, HARVARD
THE POPLARS
First Prize, Intercollegiate Exhibition, 1905



MAURICE T. FLEISHER, PENNSYLVANIA — LES CYGNES
SECOND PRIZE, INTERCOLLEGIATE EXHIBITION, 1905

haust the edition, and copies are now so rare that it seems worth while, as a matter of historical record, to enumerate here the names of those who took part. For Harvard, in addition to the winners mentioned above, pictures were shown by Monroe Buckley, Julian Burroughs, Everett Lamont Getchell, William Albert Rorer, Jr., R. W. Shapleigh, A. H. Shearer, Walter Babcock Swift and Herbert Stanley Welsh; in all eleven exhibitors. Strangely enough Pennsy also had eleven, namely, Oswald T. Allis, Herbert S. Bowles, H. Kennedy Hill, Robert H. Ivy, Arthur C. Jackson, Walter M. Mitchell, C. Leonard E. Newland, Frederick Pierce, Layton B. Register, Albert C. Sautter and Charles K. Taylor.

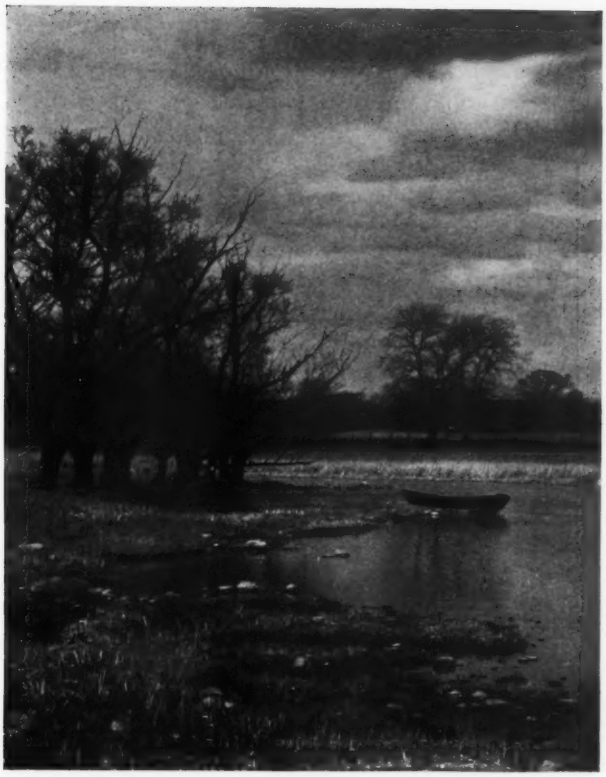
During the year following the first contest, which was consumed in vain correspondence about conditions for the next meeting, resulting in disagreement and the loss of a year, the membership of both clubs changed rather materially. At Philadelphia, indeed, a sort of resting stage was entered into, during which the club merely vegetated without possessing energy enough for new growth. At Cambridge nothing of interest happened outside of the Annual, and when June came almost all of the old men were lost by graduation. In the fall of 1902, armed with a large membership of new men and plenty of courage, the Harvard Camera Club reopened negotiations, and the Quakers having also replenished their list, matters were soon satisfactorily arranged on the same basis that has governed the succeeding contests until this year's enlargement of the field. I remember that the greatest hitch in the diplomatic overtures came over the question of the catalogue, Harvard contending that the profits, if any, should be divided *pro rata* according to the amount of advertising secured by each club; but the point was yielded, and when the division came each club received the princely reward of eighty-eight cents. Another tender point was whether each man be absolutely required to do all his own work on his exhibition pictures. Pennsy at that time had occupied new rooms in the Houston



THEODORE MARSHALL, PENNSYLVANIA THE DOORWAY
HONORABLE MENTION, INTERCOLLEGIATE EXHIBITION, 1905

Club, with first-class dark rooms, enlarging apparatus and exhibition facilities in one of the large rooms downstairs, whereas Harvard, thrust forth by the authorities from even the miserable dark room in the basement of Sever Hall which was its sole pretense to club rooms, had to rely on the men doing their work where they could, with the natural result that most of them had to let others "do the rest" for them. Harvard, therefore, insisted on the following rule: "The composition and exposure of each picture must be entirely the work of the exhibitor. He may have all the rest of the work done; in case of a tie, however, preference will be given to the man who has done his own work."

All vexed questions having been settled, the pictures were submitted in Philadelphia to Messrs. Edmund Stirling, Henry Troth and Robert S. Redfield, and it was Pennsy's turn to rejoice. They won the contest, and left only the second prize and one mention for Harvard men. First went to C. Leonard E. Newland, whose picture "Evening" was unquestionably the finest thing in the 1903 exhibit, if not, indeed, of any. The print was a sepia of wonderful



MALCOLM D. MILLER
HARVARD CAMERA CLUB

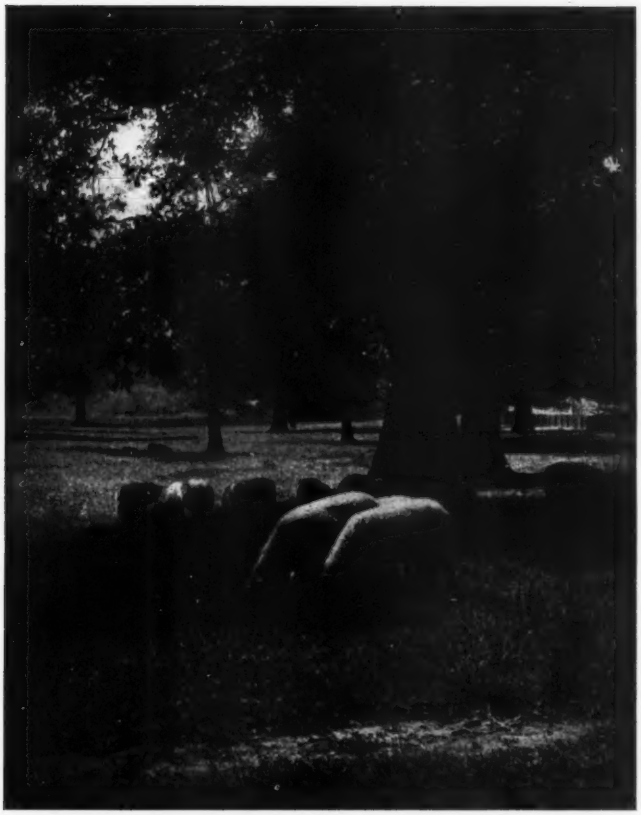
APRIL

beauty, expressing perfectly the mystery of twilight. Ernest L. Carr and William G. Housekeeper took each a mention. Professor Olmsted of Harvard received second for "Where the Dead of a Dead Past Lie," reproduced herewith, and Herbert S. Welsh, then president, received a mention for "A Dutch Courtship."

Each club now having a win to its credit and the conditions being satisfactory, the event came off in 1904 without a hitch, although some delay was occasioned by a rumor that the periodic efforts to get other University Camera Clubs to participate were about to succeed. The Yale Camera Club, for example, was reported as showing unusual activity and as likely to join, but a letter from the secretary soon after informed us that the club had been forced to disband because of lack of interest, another evidence that athletics is the Yale man's only *métier*. Late in April the pictures were put before a jury

GEO. W. OUTERBRIDGE, HARVARD — ALONG THE PEGNITZ, NUREMBERG
HONORABLE MENTION, INTERCOLLEGIATE EXHIBITION, 1904

composed entirely of Photo-Secessionists, Miss Mary Devens, Alvin Langdon Coburn and H. A. Hess. Had the rules of the contest not limited the awards, Harvard's victory would have been more sweeping than it was, for the judges wished to give two more mentions than were allowed to Harvard pictures, and requested that they be marked in the catalogue as especially noteworthy. Pennsy, notwithstanding, won second prize (Mr. Fleisher's "Street Scene") and one mention (Layton B. Register's "Lotus"). Extraordinary efforts had been made by the Harvard exhibitors, and the result of careful selection of mounting papers and the mounting by a committee of the officers of all pictures not suitably finished in this respect made the Harvard fifty remarkably effective. Willard C. Greene took first for a beautiful sepia platinum gum-bichromate print called "Early Morning," and his "Daughter of Delilah" was recommended for special award. The mentions were given to Malcolm Dean Miller ("At the Wharf"), George W. Outerbridge ("Fiesole"), F. L. Richardson ("In the Ice Floe") and Holden P. Williams ("On Lake Geneva"). Mr. Outerbridge received the other special recommendation referred to above for "Along the Pegnitz, Nuremberg." Harvard's fifty were divided among sixteen men while Pennsy's came from seven only.



HIRAM HALL RUSTIN, HARVARD — SHEEP
HONORABLE MENTION, INTERCOLLEGIATE EXHIBITION, 1901

Last year Harvard was the successful club, and won the contest for the best fifty, first prize and two mentions. Although twelve men had pictures in the exhibit, it seemed up to the last minute that fifty could not be obtained without waiving the rule limiting one man to ten, but fortunately some belated exhibits turned up in time to save the day. Mr. Thomas W. Sears received first for "The Poplars" and both the mentions were given to Malcolm Dean Miller ("Fitting for the Banks" and "An Annisquam Lane"). As before, Mr. Fleisher won second prize. His picture, "Les Cygnes," is reproduced here. Three mentions went to Pennsy, Robert S. Ecob's "Foggy Morning," Theodore Marshall's "The Doorway" and J. A. Mason's "In the Inlet" being the winners. The judges were Messrs. C. Yarnall Abbott, Edmund Stirling and J. Horace McFarland.

Immediately after the close of last year's exhibit Mr. Fleisher began to plan for inducing other universities to take part. After a conference with Mr. Cummings of the PHOTO-ERA, he drew up a constitution for the intercollegiate association and entered into correspondence with the clubs of all the colleges east of the Mississippi. Dartmouth and Wisconsin succeeded in getting their pictures before the judges, and Michigan and Illinois would have submitted some had there been more time; but it was impossible to postpone the judging beyond the last of March. Messrs. F. Holland Day, J. H. Garo and Frederick Haven Pratt formed the jury this year, and awarded the prizes under the new rules as follows: —

The best exhibit as a whole, Camera Club of the University of Pennsylvania.

Second best exhibit as a whole, Harvard Camera Club.

First prize: J. A. Mason, University of Pennsylvania, "Over the Hill."

Second prize: Miss Blanchard Harper, Wisconsin, "Evening."

Third prize: E. J. Wendell, 2d, Harvard, "In the Mountains."

Honorable mention: Thomas W. Sears, Harvard, "A Peaceful Morning"; Dana F. Dow, Harvard, "Pines at Echo Bay"; E. H. Greening, Harvard, "Scene in Venice"; S. W. Fernberger, University of Pennsylvania, "The Mission Portico"; Livingston Corson, University of Pennsylvania, "The Head of the Rapids"; M. T. Fleisher, University of Pennsylvania, "A Decorative Design"; B. W. Pond, Dartmouth, "Mer de Glace."

With such a history to demonstrate to the members of other universities the solid qualities of the achievements of the past and with a guarantee of permanence under the newly adopted constitution, which provides for an automatic succession, it is hoped that not only all the universities at present interested but several more will sign, and thus make this intercollegiate contest one of widespread benefit. It should benefit all who take part in it by making them more thorough students of nature and art, stimulating them to do the best that is in them for their own sakes as well as that of their college. It should benefit the camera clubs by giving them a more interesting field and an incentive to work. And it should benefit the art of photography by training in the various preparatory schools a number of young enthusiasts anxious to excel their comrades when they reach college and become eligible to exhibit in this annual event. A training in the seeing and reproducing of the beautiful, such as this will be, cannot help but be useful to individuals and institutions alike.

By the terms of the constitution, Mr. Maurice T. Fleisher of the University of Pennsylvania will fittingly be the President of the Intercollegiate Association as well as of his Camera Club next year. Harvard will care for next year's catalogue and, inasmuch as the same men will be in control, all that is needed to make next year's exhibition a success is for every man in every college camera club east of the Mississippi to begin now to make pictures for it and to see that his club belongs.

MALCOLM D. MILLER, HARVARD
FITTING FOR THE BANKS
HONORABLE MENTION, INTERCOLLEGIATE EXHIBITION, 1905

HOLDEN P. WILLIAMS, HARVARD — ON LAKE GENEVA
HONORABLE MENTION, INTERCOLLEGIATE EXHIBITION, 1904

ROBERT S. ECOB, PENNSYLVANIA — FOGGY MORNING
HONORABLE MENTION, INTERCOLLEGIATE EXHIBITION, 1905

C. S. LUITWIELER
POSTAL PHOTOGRAPHIC CLUB

BREAKING WAVES DASH HIGH

HOW A PHOTOGRAPHIC LENS WORKS

C. H. CLAUDY

WHEN you stop to think about it, the camera and the photographs it makes are about as wonderful things as science has ever produced. Like the telephone and the telegraph, the photograph is a matter of such common knowledge that we are wont to think of it as a matter of course, when in reality, every time we have our pictures taken, we assist at a marvel. And if I was required to state my opinion regarding the most marvelous thing about this marvel, I should unhesitatingly say that the performance of the lens is the most wonderful. Here is a little bit of glass, of peculiar shape — perhaps several little bits stuck together — and a light-proof box with a screen at one end. Point the lens end at any illuminated object and what happens? A perfect image of that object, every part of it reduced to its proper size in a small scale, is seen upon the screen. A painter would take days to produce a similar picture, and then with nothing like the fidelity to nature this image shows, although it is produced in an instant. Moreover, this image is only clearly defined when the screen and the glasses are at a certain distance from each other, and the smaller the lens, in diameter, in proportion to this fixed distance, the more distinctly the image shows, although as the opening in the lens is made smaller — "stopped down," to use a photographic term — it is less and less briliiant.

Now, the most peculiar thing about this wonder, this hand-made marvel-producing piece of glass, is that no one knows the rights of how it works! We have excellent working theories, which seem to fit the facts, and which enable us to make different kinds of lenses with surety and ease; but all the same, no one can say "I know," when the question, "What is light?" is brought up.

CHARLES E. FAIRMAN CARMEN

Filling all space and permeating all matter is supposed to be an impalpable something, capable of transmitting heat and light; this something is called the ether. We know that sound is a phenomena of our ears, caused by the vibrations of air set up by any suitable occurrence, and we believe that sight is a phenomena of our eyes, caused by the impingement of vibrations of ether, which we call light, upon the sensitive retina. In the same way, we know that color, as color, does not exist; colored objects are merely those which have the property of reflecting light vibrations of different intensities, and our eyes have the peculiar ability to differentiate between some of these different intensities, by recognition of them as blue, green, violet, etc. However, although we do not know anything definitely about the ether, we believe in it because we must. Now, all the light which comes to the earth in the daytime comes from the sun (we will neglect the starlight in this discussion). This light is reflected from everything it strikes, and it is these reflected rays we see with our eyes when we say, "I see the object." We do not see the object; cut off the light and we cannot see anything, yet the object is there, and our eyes open. We see the light rays reflected from every point of that object. Every individual

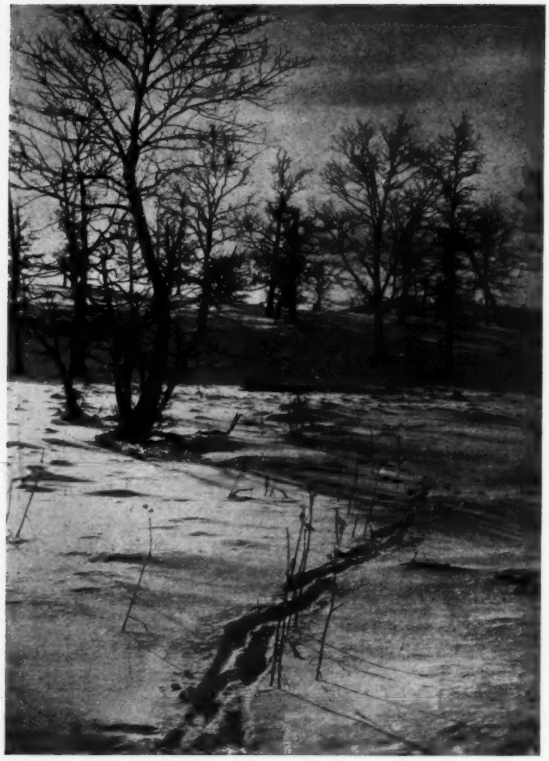
POSTAL
PHOTOGRAPHIC
CLUB

HENRY HALL THE VASE

surface part of that object is reflecting light in all directions. In *all* directions, except behind it or through it, of course. And *every* part of the object is doing this multitudinous reflecting.

Now, suppose we hold a piece of white paper up, say at thirty feet from an object — such as a white fence. The paper receives upon its surface the reflected light from every visible point in that white fence, all over its surface. As each particle of paper surface receives light from each particle of fence surface, the paper seems simply brightly lit. But if by some magic we could isolate one set of rays from the fence, so that each particle on the fence would send one ray to one part of the paper, we would see an image of the fence on the paper.

This is the easiest thing in the world to do — simply provide a perfectly dark room, paste a piece of cardboard over a slit in the window, and punch a hole in it with a needle. If you stay in this dark room until your eyes are accustomed to the dim light — until the pupils have expanded sufficiently to take in all the light possible — you will see a perfect reproduction of the scene outside, upon the cardboard. This reproduction becomes smaller, *less* clear and *more* brilliant as the cardboard is brought nearer the hole; and larger, clearer

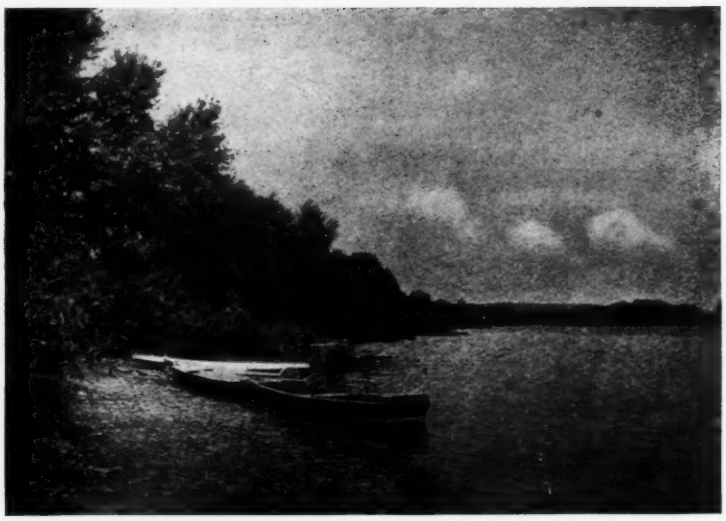


HERBERT F. SMITH LENGTHENING SHADOWS

and *less* brilliant as the board is moved away. The reason for this picture is easily understood. Of the multitude of light rays, reflected from any one part of the object, only one small bundle falls upon the pinhole and goes through. All the rest strike the opaque outside of the room, and are again reflected off into space. The little bundle, or "pencil" as it is called, of light waves, which hits the pinhole, goes through until stopped by the cardboard screen. But an immense number of such pencils are entering the pinhole at different angles, each from a different part of the subject. And when these strike the screen they form little spots of light, the same color as the object they came from, and in the same relation to each other as the particles of the object from which they were reflected bear to each other. These little spots of light overlap and intertwine, and behold! we have a "pinhole" picture!

No lens made can take a picture truer in perspective and with such freedom from distortion as can the pinhole. But the pinhole has to be so small (else the pencils of light would be big enough to make a confused, instead of a clear,

WM. H. ZERBE, JR.
FLYING THE KITE
POSTAL PHOTOGRAPHIC CLUB



GURDON R. FISHER
AFTER THE STORM

LEWIS J. FITLER
ALONG THE SUSQUEHANNA

POSTAL PHOTOGRAPHIC CLUB

C. R. TUCKER THE MILL

image) that the making of a photograph by the pinhole method requires much time. The pinhole is like a fine water-pipe, the lens like a large pipe. The same amount of water can be run through the little pipe as through the large pipe, but it will take as many times longer as the little pipe is smaller than the big one.

The practice of photography demands that pictures be taken in small intervals of time. Consequently, we must have some means of enlarging our pinhole, and still retaining a clear image. This means is the lens.

Glass and other transparent bodies have the property of bending a wave of light. Stick a pencil in a glass of water, and it appears bent. The light reflected from the pencil in the water is bent by what is called refraction. Now, if we can so shape a piece of glass that, when fitted over the hole, which has been enlarged, in the dark room, it will collect the scattered pencils of light

S. I. CARPENTER

POSTAL PHOTOGRAPHIC CLUB

THE MAINE COAST

J. HORACE McFARLAND

POSTAL PHOTOGRAPHIC CLUB

PLANT LIFE IN SHADY WOODS

GURDON R. FISHER
POSTAL PHOTOGRAPHIC CLUB

SEPTEMBER MORNING IN THE HILL COUNTRY

which fall on it, and bend them all to a common center, so that they meet at one point on the screen, we will have multiplied the speed of the pinhole by as many times as the lens is greater in area than the pinhole, less a small per cent lost in reflection and absorption.

Take any magnifying-glass, or reading-glass, and hold it in the sunlight, with a piece of paper before it. Moving it to and fro, there is found to be one position where the spot of light formed is smallest and brightest. This spot of light is an image of the sun, formed by the lens on the paper. Probably the paper will smoke and burn shortly, because all the light and heat that falls on the glass has been sent to a common center, and that one spot is as many times hotter than plain sunlight as the area of the lens is greater than the area of its image. (This is the theory and takes no account of dispersion of heat by conduction, etc.)

You will notice that the image of the sun is colored at its edges, and not sharp. The single glass does not do its work properly. Doubtless you know that a prism of glass will break up a beam of sunlight into colors. The reason is: sunlight is composed of seven primary kinds of light, and each is refracted more, when passing through glass, than the previous kind. Now, it is obvious if a lens refracts one kind of light more than another, they will not all come to a point at the same place. Consequently, with the plain "uncorrected" reading glass, you see color. In a good photographic objective this tendency is

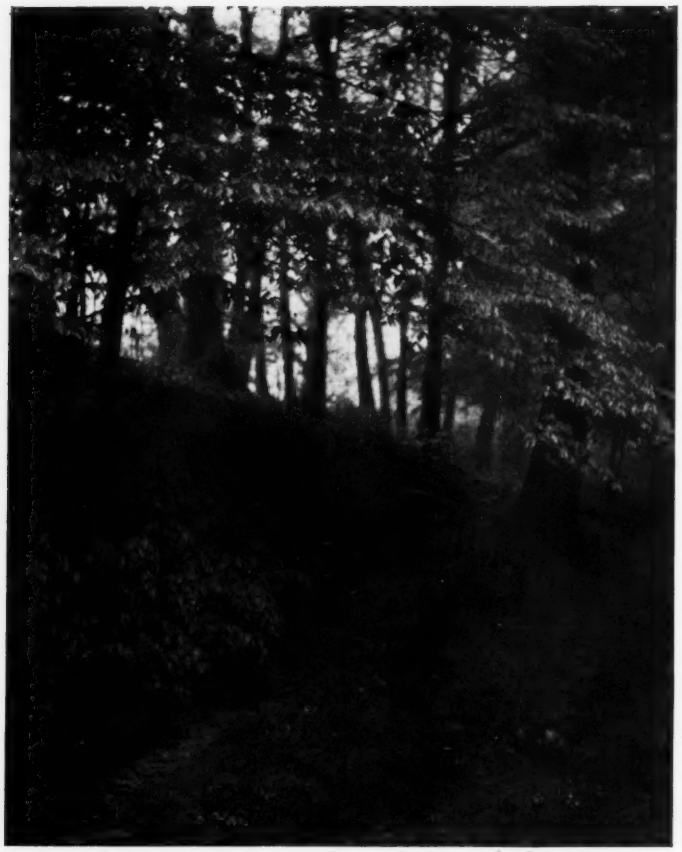
IRVING K. PARK
POSTAL PHOTOGRAPHIC CLUB

A JUNE FLOOD IN THE FOREST

corrected by combining two or more varieties of glass, of different refractive power, so that one counterbalances the other. By this means the light with which we see, and what is known as the chemical rays of light — very powerful rays which we do not see — are brought to the same point of focus. Then when we put our lens in the dark room (camera) and focus an image upon the screen, the rays we do not see come to the same focus as the rays we do see; and when the sensitive silver compound surface is put in place, the invisible and visible rays act in the same place. A lens corrected for color is called an achromatic objective.

But it is very difficult to make a lens which will render straight lines as straight lines. To do this, we make what is called a symmetrical doublet — that is, a lens composed of two corrected lenses, placed one behind the other. The faults of number one are corrected by number two, and the distortion of number two is made *nil* by previous distortion the other way by number one. It is like two men hitting a post on opposite sides, with sledge hammers — they hit at the same time, and with equal force, and the post does not bend in either direction.

But in spite of all this correcting, there still remain a great number of errors of truth to be corrected; to give them their technical names, astigmatism, flare, curvature of field, etc., each of which must be compensated for by the addition of a new glass, or the peculiar shaping of one already used. This calcu-



WM. T. KNOX — JERSEY WOODLAND
POSTAL PHOTOGRAPHIC CLUB

lating of the lens is a most abstruse problem in practical photographic mathematics, and must be left to those who have made a life study of it. There has never yet been made a lens which was absolutely perfect, but the lenses now produced do such wonderfully true work that it takes an expert test and a microscope to discover in what way they are imperfect.

But the most complicated lens, made of the greatest number of glasses and corrected for every known distortion, is nothing more, in principle, than a big pinhole, which possesses the property of ending all the pencils of light which fall upon it from one object, into a focus at some point behind it. The bigger the lens, in proportion to this distance, the more light it lets in, and the quicker

R. E. SCHOULER
POSTAL PHOTOGRAPHIC CLUB

THE_WHITE_BIRCH

it can take photographs; but also, the bigger it is in proportion to its focal length, as this distance of lens to image is called, the more difficult it is to correct and make so that it will produce a clear image. Consequently, the faster a lens is — other things being equal — the more expensive it is. You see many lenses advertised, and doubtless some of you, not familiar with the subject, have wondered what such expressions as f. 6.8 or f. 5.6 might mean. F. or f. stands for the words "focal length," — that is, the distance the image formed by the lens is from the lens when it is focused upon a distant object, and the numbers after the F. or f. mean that if this f. distance be divided by that number, the diameter of the lens will be had; in other words, that the working diameter of the lens

ANSEL W. NEWMAN
"TELL ME A STORY, GRANDPA"

(according to the symbols mentioned) is one sixth and eight-tenths or one fifth and six-tenths of the focal length. If a lens is workable at an aperture of one inch, and its focal length is eight inches, its symbol would be f. 8. A lens of twenty inches focal length with an aperture of f. 16 would have an opening one and one-quarter inches across (these figures are for simple lenses; corrected lenses do not figure out exactly this way, but it is near enough for purposes of explanation).

Finally, let me say that I have not begun to explain the wonders of a photographic lens, nor to try to write more than the most elementary explanation of how the lens works. It is a complicated subject and requires much study to comprehend — and such comprehension is only needed for the lens user. But I am confident that the wonders of the working of a lens, and the broadly stated principles of its action, which I have endeavored to lay down, should be of interest, from the academic standpoint, to any one.

C. S. LUITWIELER
AFTER THE STORM
POSTAL PHOTOGRAPHIC CLUB

THE POSTAL PHOTOGRAPHIC CLUB OF THE UNITED STATES

G. A. BRANDT

THE early history of the club is somewhat obscure, but from the best obtainable information the club originated in February, 1885. The first album was issued in the latter part of April of that year. For several years thereafter the club underwent many vicissitudes, and it is understood was more than once disrupted. In December, 1888, it was entirely reorganized and a new constitution adopted. Since that time the club has maintained its organization uninterruptedly. During the past few years the club has prospered, and is at the present time in a most flourishing condition. The list of members is nearly full. Membership is limited to forty. At times, during the past few years, the applications for membership have been so numerous as to necessitate keeping a "waiting list."

At first, the albums circulated by mail — hence the name of the club. The increased membership, however, together with the adoption of the note-books containing, as they do, written matter, rendered the albums unmailable, except as first-class matter, and it became necessary, on account of the weight of the packages, to abandon the mails as a vehicle of transmission.

Owing to the weight of the packages containing the albums and note-books and the heavy charges for expressage, membership in the club is restricted to persons residing East of the Ohio River.

The object of the club is advancement in photography through the medium of monthly albums and note-books circulated among the members.

The personnel of the club includes some of the most accomplished amateur photographers in the United States.

The aims of the club may be briefly summed up as: —

1. The assembling in albums of prints of members of the club.

2. The opportunities afforded by the note-books for interchange of ideas and fair, dispassionate criticism of the work presented by each member.

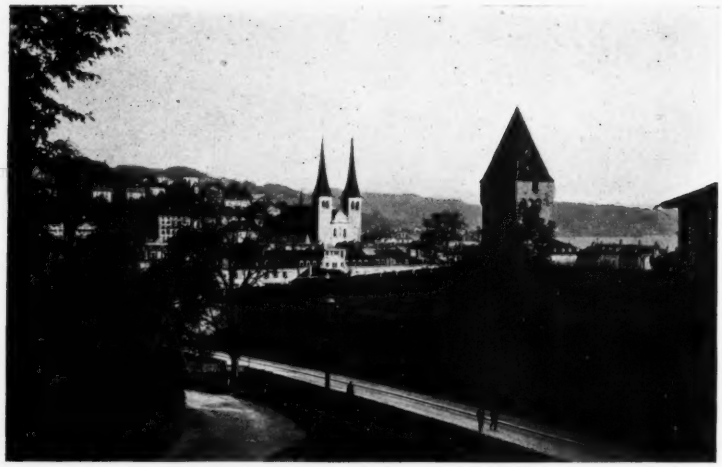
3. The pleasure of examining the work of accomplished experts.

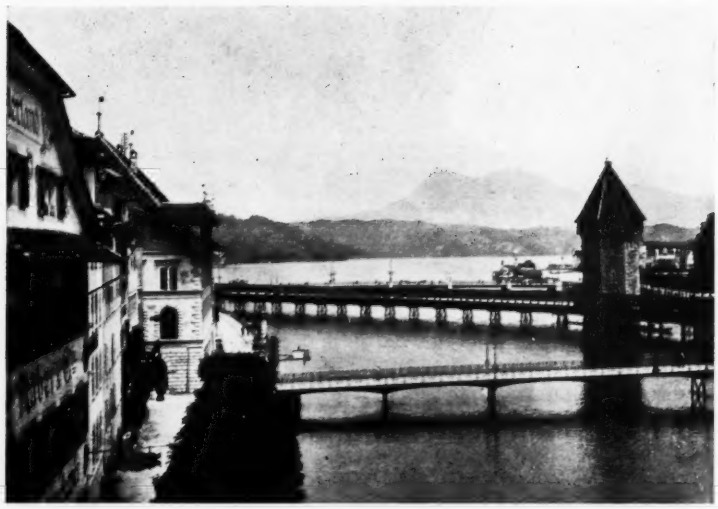
4. The advantage and instruction to be derived from the frank, wholesome and unbiased criticism to which each print is subjected.

It may be added that on the first round of each album the name of the maker of the print is suppressed, thus rendering the artist incognito and affording scope for more freedom of comment.

The note-books constitute one of the chief elements of strength of the club. Primarily, they were used solely for criticism of prints, but their scope has been greatly extended from time to time. They now contain the monthly official route list of the albums, a monthly report by the secretary and treasurer; they afford a convenient vehicle for suggestions, the discussion of topics of interest and profit to the club, and they play an important part in the promotion of sociability among the members and frequently lead to the formation of lasting ties of friendship.

E. H. WASHBURN
A MEADOW LANDSCAPE
POSTAL PHOTOGRAPHIC CLUB





WILFRED A. FRENCH
OLD WALL, LUCERNE
KAPELL-BRÜCKE, LUCERNE

A PHOTO-ERA TOUR IN EUROPE

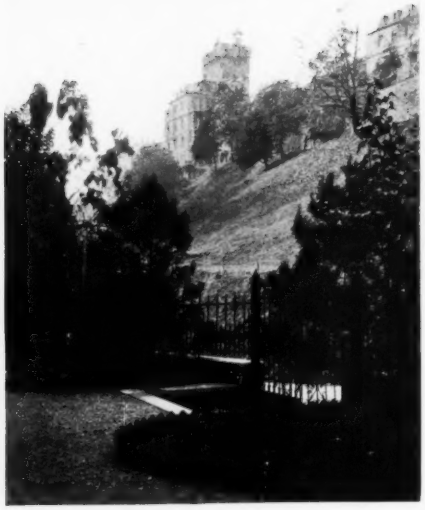
(*Continued*)

LUCERNE, MT. PILATUS, LAKE LUCERNE AND THE ST. GOTHARD RAILWAY

WILFRED A. FRENCH, PH. D.

OUR rooms looked out upon the rapidly-flowing Reuss — here leaving the lake and entering upon its northerly course; the terrible Pilatus, looming up in front of us; the ancient Chapel Bridge and Water Tower, and the emerald waters of the lake — alive with craft — terminating at the left with the well-known contours of the Rigi. Who is not familiar, in some form or other, with Lucerne and its treasures? But no pen, palette or camera can adequately portray the extraordinary beauty of its situation, or the prospect spread before the eye of man from any of its surrounding hills. We were blessed with grateful returns from our photographic ventures — souvenirs of scenes of ineffable beauty and charm, which, blended with gentle thoughts of by-gone realities, may be metamorphosed into dreams of inexpressible delight. The noble self-sacrifice of Arnold of Winkelried, five hundred years ago, may be a myth and one may question even the splendid courage of William Tell; but there is no doubt of the magnificent heroism of the Swiss guard, who died to a man in the defense of Louis XVI. Thus one looks with emotion upon the Dying Lion, conceived and modeled by Thorwaldsen, and hewn out of the living rock by the Swiss artist, Auer.

Of the six famous view-points offered by the Lake of the Four Cantons, as it is more generally known, we chose Pilatus for our ascent. Although the weather seemed perfect and not a cloud veiled the brow of the rocky monster, we learned that the day was not propitious for a view from the summit, and that news of a favorable prospect would be telegraphed from the top and posted in every hotel of Lucerne and the neighboring districts. The next morning we were greeted by a dense, impenetrable fog. Nothing was visible. Disappointed and sad, we ventured out into the street, where we observed scarcely a sign of life. Objects more than three feet distant were invisible. Not a team was abroad. Lucerne seemed like a city of the dead. We partook of our breakfast in silence. Hardly had we finished, when our attention was attracted to a commotion in the office, the cheery voice of Herr Zähringer being plainly audible — "*Alles ist gut, meine Herrschaften. Der Berg ist hell!*" We all rushed out into the corridor, where we beheld a number of guests staring at a large red sign in black letters bearing the trilingual announcement, "Pilatus — hell, clair, clear." We fairly danced for joy. To dash upstairs, unmindful of the elevator, gather our wraps, cameras and field-glasses, was the work of a moment, and, conducted by the porter, we slowly picked our way to the railway station. It puzzled us to understand how the view from Pilatus could be clear with Lucerne and the lake buried in a deep fog. In thirty minutes the train stopped. We were at the base of the enchanted mountain. We at once stepped on board the curiously shaped car, which was to convey us over the celebrated Pilatus railway, considered the boldest and grandest in the world — most daringly



WILFRED A. FRENCH
THE MÄNNLI TOWER, LUCERNE
LUCERNE AND PILATUS

WILFRED A. FRENCH SPRUER BRÜCKE, LUCERNE

constructed, yet absolutely safe. The fog continued as thick as ever, though we gradually climbed higher and higher. Suddenly, without a moment's warning, we were flooded with the warm and dazzling rays of King Sol, whose domain we had just entered. We were above the fog, stretched before us like an ocean, upon whose downy, undulating surface were scattered several islands, which with the aid of our binoculars we identified as the Stanzerhorn, the Rigi and the Bürgenstock. Above us a beautiful mackerel sky and the horizon, alive with snowy crests, expanding each moment, as the engine, with labored efforts, lifted us higher and higher into regions of awe-inspiring grandeur. Up we climb, over ravines and through tunnels, our vision broadening continually, till at last we reach the Pilatus Kulm. The prospect hence is wild and grand, almost overpowering. But close beside us towers the isolated peak of the Esel. A view from its bold summit must be even more commanding. An arduous pull along the iron balustrade and in ten minutes we are at the top! Grand beyond description is the view that now presents itself to the observer. The mind fails to grasp the beauty, the vastness, the sublimity of the scene. Only after the lapse of several minutes are we able to concentrate our attention upon the details of this colossal picture. The sea of mist, like an immense cloak of ermine, lies far below us, seemingly following the course of the lake. Closely ranged

WILFRED A. FRENCH PILATUS KULM

about us lie the Matthorn, the Tomlishorn, the Oberhaupt and the Klimsenhorn, which, with the Esel, form the principal peaks of Mount Pilatus, their precipitous heights flecked with snow. Encircling these are hills and valleys, immediately followed by mountain ranges in endless perspective, their summits glistening and shimmering in the noonday sun. To be unmindful of photography at a time like this, were but human; yet we realized, as never before, how futile would be our attempts to impress the photographic plate with the glories of nature, such as we now beheld. But true to our picture-making propensity we made numerous exposures, which afterwards seemed to justify our temerity. Only too soon came the hour for our return to the city and, grateful for the glorious opportunities vouchsafed us by a bountiful Providence, we entered the car and began the downward journey. Lengthening shadows were creeping over the landscape and the *Wolkenmeer* had receded very appreciably, thereby imparting a different character to the scenery we had admired during our ascent of the mountain. Bye-and-bye we reached the surface of the vapory sea and once again we were wrapped in its chilling embrace — isolated from light and life. Thus we continued the descent to Alpnachstad and the return to Lucerne, which we found still buried in gloom. During the evening a strong eastern wind brought relief and, before retiring for the night, we were able to distinguish the jagged outline of Pilatus.

WILFRED A. FRENCH
ASCENDING THE ESELWAND, PILATUS

Our departure from the queen-city of Switzerland was signalized by a steamboat ride to Flüelen, situated at the southern extremity of Lake Uri, a branch of Lake Lucerne, or the *Vierwaldstätter See*, as it is known in this locality. The day is clear and we find the lake more beautiful than we had expected. We are mindful, too, of the historical associations which mark its lovely shores, including the exploits of William Tell, the national hero of Switzerland and the champion of its independence. We realize that this ride is one of the events of our trip through Switzerland. We pass the Wagner House, the first conspicuous object on our right, rejoicing that the master spent the six years of his exile in so delightful a spot. Pilatus, looking less defiant since our victorious ascent of yesterday, presents a magnificent spectacle. His rival, opposite, the Rigi, smiles down upon us, although we had not honored it with the customary visit. We admire each village, as the boat stops successively at Weggis, Vitznau, Büochs, Beckenried, Treib and Brunnen. We now proceed southward, entering the Lake of Uri, and soon observe on our right, the "Schillerstein," a huge stone pillar rising abruptly out of the water, which the grate-

WILFRED A. FRENCH STEAMBOAT LANDING, LAKE URI

ful Swiss have converted into a monument to the poet, who has immortalized the deeds of her heroes. A little farther on we arrive at a small plateau — the "Rütli," where, according to tradition, three brave men, staunch and true, met on a night, six hundred years ago, and took a solemn oath to rid their beloved country from the yoke of the Austrian. The shores here converge, rising almost perpendicularly from the lake. The stillness and grandeur are impressive in the extreme. We need but a storm to imagine the scene of that fatal night, when Tell steered the boat containing the tyrant Gessler to a convenient point and then leaped ashore, disappearing in the darkness. And there, on the opposite shore, whither the boat is now turning, is Tell's Chapel, the Mecca of all loyal Swiss. Beyond and high up, we note a seam running along in the rocky wall of the mountain. It is the famous carriage-road — the *Axenstrasse*, connecting Brunnen with Flüelen. We left the boat at Tell's Platte, visiting the Chapel, then climbing up the steep path to Tell's Ruhe, situated near the *Axenstrasse*, where we lunched. Then we began our walk to Flüelen, along this remarkable piece of Swiss engineering skill — the *Axenstrasse*, delighting in the magnificent scenery to the south and west of Lake Uri. At the Axenfluh, in the tunnel pierced with several large openings, where the road rises to a height of over 400 feet over the lake, we were suddenly overtaken by the Föhn, the Alpine south wind, which enveloped us in a cloud of dust, almost smothering us. There was no escape. After the playful zephyr had spent its force, we found ourselves covered from head to foot with a thick coat of light-gray dust, transforming us into strange-looking objects. Recognizing each other only by our voices,

WILFRED A. FRENCH
TELL'S CHAPEL, LAKE URI
THE AXENSTRASSE, LAKE URI

we continued our promenade, enjoying the superb view of the towering Bristenstock, proudly guarding the village of Flüelen lying cosily within its shadow.

Boldly planned and skilfully constructed is the St. Gothard Railway, which, everybody knows, is the great international highway between the North and the South of Europe. It is built primarily to accommodate traffic and to convey travelers as speedily as possible from the heart of Switzerland to points immediately south. The section lying between Amsteg and Bellinzona, including the wonderful St. Gothard tunnel, affords some of the most magnificent mountain scenery imaginable and also represents the high-water mark of engineering skill. Unfortunately neither can be fully appreciated from the railway, but rather from the well-constructed carriage-road, which, south of Göschenen — the northern terminus of the famous railway tunnel — is known as the St. Gothard Pass. But we were already ten days behind schedule time, so at Flüelen we boarded the train for Italy. The weather that day was showery, but it did not wholly mar the exceedingly interesting trip. We had previously studied the remarkable character of the railway and with map in hand carefully followed the course we were traveling. I wonder if many of the vast number of persons making this trip realize what enormous difficulties the train has to overcome before it arrives at Bellinzona. At Amsteg it rushes out of a long tunnel, crosses an imposing bridge several hundred feet above a roaring mountain torrent, only to quickly disappear in another and still longer tunnel. This game of hide-and-seek is kept up until Gurtnellen is reached. Here, however, the train enters a spiral-shaped tunnel and leaves it at an increased elevation of several hundred feet. A few minutes later it nears Wassen, where it displays the greatest triumph of railway engineering in the world. After circling twice around this loftily-situated village, by means of spiral tunnels inside of two mountains separated by a deep ravine, and crossing the Maienreuss three times by bridges of different levels, the train reaches Göschenen. Hardly recovered from our hair-raising experience, we now plunge into the great tunnel — *over nine miles in length* — wondering if there were any limit to the constructive ingenuity of the Swiss engineer. Our passage through Mount St. Gothard, effected in sixteen minutes, occasioned no discomfort, whatever, owing to the perfect system of ventilation operated from one end of the tunnel to the other. The wonderful spiral tunnel of Gurtnellen was repeated four times during the rest of the trip, those constructed at Faido being mathematically perfect circles. We had now descended into a country which in surroundings, architecture, costume, physiognomy and language, was Italian, though Swiss politically. The smiling verdure of the landscape, the lemon and fig trees, the glorious chestnut and walnut woods and the luxuriant vegetation indicated that we were nearing "the garden of the earth" — Fair Italy. Soon we were at Locarno, the end of the route and the northern extremity of Lago Maggiore. This was our first acquaintance with a Swiss town, typically Italian. We passed three hours here, scarcely realizing the change only a few hours had wrought, and then took the boat for Pallanza. (*To be continued*)

VIEW FROM MOUNT PILATUS

VICTOR HUGO

It is a solemn hour and one filled with meditations
In which one has Switzerland beneath one's eyes.
That sturdy knot of strong men and tall mountains,
Inextricably knit into the heart of Europe,
Which notched the battle-axe of Austria
And broke the formidable sword of Charles the Bold.
The Creator made her mountains. William Tell made her men.
One's emotion is intense.
For the memory is no less occupied than the eye.
It is not only a segment of the globe that one has beneath one's eyes,
It is a segment of history also.
The tourist comes here in quest of a prospect;
The thinker finds here an immense book,
In which every rock is a letter, every lake a sentence,
Every village an accent, and from which ascend,
Mingled together, like a cloud of smoke,
Two thousand years of memories.

EDWARD MACDOWELL

EDWARD MACDOWELL, born in New York, has Irish-Scotch blood in his veins; hence, no doubt, the Celtic spirit of some of his more important piano works, as the *Scotch Poem*, composed when he was living at Wiesbaden; and the *Sonata Eroica*, the *Norse Sonata*, the *Celtic*. Although he studied at the Paris Conservatory when he was at an impressionable age, French musical thought had little or no influence over him; but the influence of Joachim Raff, his chief master, was strong, and for a time it threatened to choke his own individuality. The influence of Raff is often seen in MacDowell's thought and expression, and to such a marked degree in the first orchestral suite that even a careless hearer would swear confidently that no one but a sympathetic pupil of Raff could have composed this suite. After MacDowell's return to this country he found other thoughts and other forms of expression, as in the *Indian* suite, conceived before Dvorák's symphony, *From the New World*, was performed, and in impressionistic piano pieces composed after he was on familiar, intimate terms with Nature as she reveals herself in New England. Yet, it should be remembered that one of his most original and imaginative compositions, *The Eagle* (after Tennyson), was composed a little time after Raff's death and when America was to him a word without peculiar significance.

When the youth was in Paris, there was talk of his abandoning music for the sake of painting. He was then more interested in piano playing than in composition. As a piano virtuoso he was an artist in black and white, rather than a colorist. His chief characteristics were a singular continuity and fleetness of expression and a rare and at times granitic force. He apparently disdained nuances and demi-nuances; he was frank rather than subtle; he rejoiced in open air, not twilight effects. He was robust physically and mentally, and he expressed himself robustly by means of the piano. But as a composer he is first of all impressionistic, and the hearer himself must meet him halfway. MacDowell's music at its best is never obvious, never purely decorative. It is not surprising, then, that it is caviar to many who cannot understand why he is put by his friends, admirers and partisans at the head of native-born American composers. No matter which one of his songs, for instance, may be sung in recitals, songs by other American composers awaken more spontaneous and hearty applause, even when they may be commonplace, for their appeal is more direct and the climax is conventional and expected. The composer of moods will never have a large and miscellaneous audience, and therefore the MacDowell of the *Hexentanz* is regarded by the great public as much more of a man than the composer of *The Eagle*, the *Scotch Poem* or the sonatas.

The chief characteristic of his best music, orchestral or for the piano — for MacDowell once said to the writer that chamber music was to him as cold veal — is imagination, and by virtue of this imaginative gift he must be ranked among the distinguished composers of this or any other land. His fastidiously

DAVIS & EICKEMEYER
EDWARD MACDOWELL

artistic taste prevented his imagination running wild; his virile nature would not allow his fastidious taste to reduce imagination to merely pretty fancy. He realized that form is not a fixed and rigid mold throughout the centuries; but he also knew that formless music must also be spineless and futile. His music is nobly sensuous, but never sensual. Its melancholy is that which comes from earnest and brave thoughts of the mighty problems of life and death, of love and suffering. It has atmosphere — that in which Celtic bards and dreamers saw all things enwrapped; that of an autumnal afternoon on a New England hillside; or that of the surging, moaning sea with all its hidden mystery. The good people — elfs, gnomes, water nymphs — whispered to him their secrets. And in a vision he heard the clash of arms in battles fought fiercely long ago, the tumult and the shouting. Thus he dreamed the dreams of a poet; and in his music he wrote poetry, epic and lyrical, grave and tender; but always with a clear sight, a lofty purpose, a pure heart.

DEVELOPMENT

WILDIE THAYER

Suppose the dainty, budding rose
Refused its petals to unclose;
Should seek in darkness to retreat
And secret keep its perfume sweet.
Should say: "I for myself will bloom
Enclosed within my fragrant tomb;
With others I will never share
My beauty and my sweetness rare."

If thus its life it should restrain
A crippled bud it would remain;
But when it gladly seeks to share
Its fragrance and its beauty fair,
To others hastens to impart
The balmy secret of its heart,
It grows in beauty, grace and power
'Till it becomes a perfect flower.

EDITORIAL DEPARTMENT

Let be thy wail, and help thy fellow-men,
And make thy gold thy vassal, not thy kind,
And fling free alms into the beggar's bowl,
And send the day into the darken'd heart;
Nor list for guerdon in the voice of men,
A dying echo from a falling wall;

* * * * *

And lay thine uphill shoulder to the wheel,
And climb the Mount of Blessing, whence, if thou
Look higher, then — perchance — thou mayest — beyond
A hundred ever-rising mountain lines,
And past the range of Right and Shadow — see
The high-heaven dawn of more than mortal day
Strike on the Mount of Vision! — TENNYSON.

THE SPIRIT OF SAN FRANCISCO

(The following telegraphic pen picture by Benjamin Ide Wheeler, president of the University of California, appeared in the *Outlook*.)

THE population of a great city suddenly robbed of the entire shelter and equipment of civilized life is left standing bare under the stars. No roofs, light, food, water, furniture or tools; one suit for each person, or scarcely that. No cars; only automobiles, bicycles and wagons; the movement is mostly on foot around a fourteen-mile hem of desolation. The banks have their money locked in heated vaults. There is nothing to buy — no shops; the largest department store advertises to open in a small dwelling here. No paper, no printing-press, no telephones or telegraph. City engineers without level or compass, without records of streets or pipes. Every library burned — Public, Mechanics', Mercantile, Sutro, Law; only the unique Bancroft Library of Original Documents preserved, and now rendered priceless. It will be transported directly to Berkeley as the property of the State University. No courts or governmental buildings. The externals of life are reduced to a condition of primitive savagery. Unerringly self-government springs anew from root without resort to military laws; the ablest men come to the front; the people welcome leadership of intelligence and integrity. The government is practically in the hands of the excellent Citizens' Committee, with the Mayor presiding. Hundreds of carloads of provisions, especially of cooked food, rushed in from coast cities, averted the danger of famine. Superb order from the first. People brave, unrepining, "game"; half population now camping at

Oakland and Berkeley, or departed into country. Money needed to feed a hundred thousand people for thirty days, fifty thousand another thirty. Then fund needed to help deserving men to get on their feet. So we can use large amounts advantageously now.

The above pen picture and stirring appeal is one that calls for a prompt and generous response on the part of the public. Already much has been done in a general way to relieve distress among the afflicted. But there are individual cases where the sufferers have a special claim upon our generosity. The photographic fraternity of the ill-fated San Francisco has lost practically everything it had in the world, and the appeal which we made in our columns last month we desire to emphasize and strengthen in this issue. A committee has been appointed to start a National Fund, by a popular $5.00 subscription, to assist in reestablishing our unfortunate brothers in business at the earliest possible moment. The PHOTO-ERA will be glad to receive and acknowledge subscriptions thus contributed, and will forward same to Jos. Byron, Treasurer California Relief Committee, 53 West 32d Street, New York City.

THE INTERCOLLEGIATE

FOR some years back the PHOTO-ERA has advocated the adoption of photography as an integral part of the curriculum of colleges, including universities and the higher institutions of learning. We submit that the camera is to-day a recognized and invaluable part of the laboratory equipment of every up-to-date school. That the educator who lacks the knowledge of its manipulation deprives himself and his class of a most necessary assistant. That it is plainly of value in the study of nearly every form of science, since there are very few subjects of applied or pure science which cannot be more easily understood by its use. That, as a means of general culture, it is of unquestioned value in stimulating and training the artistic sense of the student. Finally, that it cultivates in him his powers of observation, strengthens his sense of perspective and proportion and gives him exactness of thought and expression. For five years we have consistently urged these facts upon the attention of the leading educators of the country, but apparently in vain, owing to custom and official indifference. At last the gray dawn seems to be breaking, and strange to say, it is the undergraduate who sees the light first. The Camera Clubs of Harvard University and the University of Pennsylvania have gotten together, under the leadership of Maurice Fleisher, U. P., and of Messrs. Malcolm D. Miller and F. F. Marshall, H. U., and they point the way in this first Intercollegiate Exhibit, for the other college camera clubs to follow. The task has been a herculean one, and at times well-nigh hopeless. But the dauntless spirit of these earnest young men has never faltered and the cause of progressive educational work and photography has won. We publish in this issue with much pride the results of the first Intercollegiate Exhibit. *Macte Virtute Esto.*

PHOTOGRAPHY AND THE SCHOOLS

PIRIE MACDONALD, Henry Havelock Pierce, Sadakichi Hartmann and others have been advocating in the New York *Sun* the adoption of photography as an educational appliance in the public schools, to take the place of drawing. It has called forth a spirited correspondence, some of which we reproduce here.

To the Editor of the *Sun* : —

Sir: I am a painter, interested solely in my profession, and do not know much about education, but I have talked the idea over with other painters, and we all agree upon the one point that photography in the public schools, no matter in what way it should be employed, would deteriorate art progress — by making the pleasures of life even more mechanical than they are to-day. The beautiful art of wood engraving has already been replaced by reproduction processes, the typewriter is very busy to destroy the originality of ideographic expressions, the pianola is making big inroads on genuine musical knowledge and now photography looms up and wants to do away with drawing.

ALBERT GOULD.

To the Editor of the *Sun* : —

Sir: Cooking, sewing, military drills and photography in the public schools! What next? Why not also amateur theatricals and automobiling?

INCENSED PARENT.

The principal objection urged, however, was the excessive cost, the objectors taking the ground that the parents of but few public school pupils are able to buy their children photographic outfits. Richard Hines, Jr., of Alabama answers this objection in this way. To us this appears to be a very silly objection. As well object to the introduction of manual training into the public schools, on the ground that each boy would have to be furnished with a fully equipped carpenter shop, or to the installation of domestic science, on the ground that each girl would have to own a steel range and the necessary cooking utensils. There is no doubt that the introduction of photography into the schools would be of great benefit to the pupil. Pictures are always interesting to children, and when they can take part in the making of them, and at the same time be learning something of chemistry, optics and the correlative sciences that cluster around photography, it is certainly well for the pupil. Powers of observation are sharpened, much of art is learned in the disposition of lines and masses and the value of light and shade, while matters of history and geography can be indelibly impressed upon the mind of the child by means of photography as in no other way. It is of so great value as an educational engine that the boards of education can well afford to stand the expense of its introduction.

We confidently predict that the time is near at hand when the camera will be as necessary a part of the public school equipment as the spelling book or the blackboard.

THE ROUND ROBIN GUILD

Conducted by Elizabeth Flint Wade. Specially designed for the amateur photographer and the beginner. Membership may be obtained by sending name and address to the PHOTO-ERA.

HONORABLE MENTION — G. EDWIN KELLER

A PIOUS old dominie sat down to write his weekly sermon, and choosing book, chapter and verse, began to set down the same at the top of his paper. Before he had finished copying his text he was called away from his desk. During his absence a waggish nephew sat down in the dominie's place and read the words: —

"I have seen the wicked in great power, and spreading himself like a green bay,"—

The nephew took the pen wrote the word "horse" instead of "tree," punctuated it with a period, drew a line beneath the text, as was the habit of his uncle, and went his way. The parson returned, and noting that the text was written and the line of demarcation made, began and finished his sermon, laid it in his drawer and on Sunday took it to his pulpit, and you may imagine the astonishment of his congregation when he read his curious text. The dominie wiped his glasses and looked again, but he knew he had copied the verse verbatim from the Bible, and bravely "sticking to his text" went on with his sermon, using the horse as his metaphor.

Now comes the reason for telling this story. The compositor made the editor say in the March number of the PHOTO-ERA that *two* ounces of ammonium persulphate and ten ounces of water are the proportions for a reducer. Like the parson the editor did not read the proof or the text, and the error arose from the fact that figures instead of words were used in manuscript in giving the proportions re-

FIRST PRIZE — FEDORA E. D. BROWN

quired, and ½ was set up as 2. Unlike the parson the editor cannot find it in her heart to stick to the text, but makes this statement in order not to lead the unwary and innocent amateur into error. So please correct your text to read one half instead of two ounces of ammonium persulphate to ten ounces of water, a formula which much experience has proved to be the most successful preparation of this valuable reducer.

ATTEND, all ye faithful Historic Guilders! Here is a task for you, set forth for the summer. It is the making of photographs of historic trees. We have some pictures already contributed by members of the Guild, but we are anxious to complete the series as nearly as possible in order that it may be catalogued and ready for the library.

In order to stimulate our members to assist in this work we publish a list of some of the pictures desired, and any member who has any of these trees for a neighbor, is requested to desire his distinguished friend to sit for his picture. Some of the trees on the list are, alas! no more, but pictures of them were made, and any one who can do so is asked to send a picture

SECOND PRIZE ROBERT E. WEEKS

of a tree that lives now only in history. First of all there is the celebrated Charter Oak, whose age was estimated at nearly two thousand years, and which was destroyed by a storm fifty years ago come August. Another oak is that under which the slaves of the region of Hampton, Virginia, first heard read the Emancipation Proclamation, and is now known as Freedman's Oak, and Emancipation Oak. A picture of the great white oak at Dedham, whose magnificent proportions are etched on the town seal, also deserves a place in this collection, as does the Eliot Oak of Newton, Mass., under which John Eliot, "seated like Abraham at eventide, beneath the oaks of Mamre," taught the Indians Christianity, and that other oak at Natick near the site of the old Eliot meeting-house which is a survivor of the "peace trees" brought by the Indians to their "apostle."

Next to the Charter Oak in historic importance is that magnificent elm at Cambridge, beneath whose wide-spreading branches Washington took command of his army. Our oak series must also contain a picture of that monarch of its species, the tree at Flushing, Long Island, which George Fox, the founder of the Society of Friends, used as his pulpit.

Among the "Liberty Trees" is the old Liberty Elm at the junction of Essex and Washington Sts., Boston, which was

THIRD PRIZE W. E. BERTLING

planted by a schoolmaster and dedicated to the independence of the colonies, and was the rallying-place of patriots before, during and after the Revolutionary War.

No picture is extant of that famous tree under whose sheltering arms William Penn made his wonderful treaty with nineteen tribes of Indians — a treaty which never was broken; but a portion of the trunk is still preserved at the Penn family home in England, and from one of its enormous branches a chair was made for that celebrated Philadelphian, Dr. Rush. This tree came to an untimely end in the year 1810, long before the days of photography.

Among trees with histories is the tall pine tree at Fort Edward where Jane McCrea was slain, the tulip tree on King's Mountain in South Carolina, where ten bloodthirsty tories were hung at one and the same time; the magnificent black walnut near Haverstraw on the Hudson, where General Wayne mustered his forces at midnight previous to his attack on Stony Point; and the beautiful magnolia near Charleston, South Carolina, under which General Lincoln held a council of war before surrendering the city.

Many trees which deserve a place in our collection, though not having direct historical associations, have been planted by men who have rendered glorious service to their country. There are the pear

trees planted more than two hundred years ago by Governor Endicott of Massachusetts and Governor Stuyvesant of New York; the ash and tulip trees planted at Mount Vernon by General Washington; the gum trees planted by Alexander Hamilton, one for each of the thirteen original states; and the elm planted on the Capitol Grounds at Washington by General Grant. Then, too, we ought to include in our collection of historic trees photographs of the remaining cypress trees on the old Jumel grounds which Napoleon imported from Egypt and presented to Stephen Jumel.

So let us rally to the work and let September see our collection of Historic Trees nearly, if not quite complete. There are many more trees which we have not space to mention, but of which some of our members have knowledge and who will be only too glad to photograph them for this unique and valuable collection. Let us make the pictures ere the subjects are no more.

ROUND ROBIN GUILD COMPETITIONS

First prize: Value $10.00.
Second prize: Value $5.00.
Third prize: Value $2.50.

Prizes may be chosen by the winner, and will be awarded in photographic books or magazines published or advertised by us; in enlargements, art portfolios of photogravures, mounts, or other photographic materials advertised by us; or, if preferred, we will send any article of a photographic or art nature which can be bought in Boston for the amount of the prize won.

RULES

Membership in THE ROUND ROBIN GUILD, with all its benefits — among which the correspondence privilege probably stands first — is free to all, and we invite every photographer to become a member. Entrance in the monthly competitions is limited to subscribers to PHOTO ERA.

SUBJECTS FOR COMPETITION

May. — "Mother and Child Pictures." Closes June 30.

June. — "Garden Scenes." Closes July 31.

July. — "Genre Pictures," Closes August 31.

AWARDS — SNOW SCENES

First prize: Fedora E. D. Brown.
Second prize: Robert E. Wecks.
Third prize: W. E. Bertling.

Honorable Mention: F. S. Andrus, Wm. S. Adams, C. H. Auch, F. E. Bronson, M. E. Baumberger, John Dove, Lewis Emmett, Miss E. Y. Goldsmith, Gust. Horlin, G. Edwin Keller, K. Theodor Krantz, Miss E. J. Kyon, E. D. Miller, Paul R. Morrison, Grace E. Mounts, John Arthur Marcy, Wm. R. Roberts, Wm. O. Ruse, George M. Sheer, M. D., William Spanton, George A. Smith, F. F. Sonberger, W. J. Scales, Monroe A. Smith, Mrs. Clara Turner, A. M. Troup, Charles Vandervelde, O. T. White, Wallace S. Williams, M. A. Yauch, James A. Young.

ANSWERS TO CORRESPONDENTS

CARLOS T. — Use citric acid to clear the whites in bromide prints developed with ferrous oxalate. If you will use metol-hydrochinon developer for your bromide prints you will get soft velvety blacks and delicate half-tones and there is no fear of staining. After development the prints are fixed in hypo, 1 oz. to 10 of water.

HELEN G. H. — To straighten your old films which are rolled so tightly as to be unusable for printing purposes, soak them over night in a solution of glycerine and water, ½ oz. of glycerine to 16 oz. of water. Pin them by all four corners to dry, then store them in a film-holder, such as is described in the March PHOTO-ERA and which you can make yourself at a very small expense.

GRACE L. M. — You will save yourself a great deal of trouble if instead of using a backing for plates you try the non-halation plates for interiors where windows are included in the angle of the lens. The exposure of these plates is usually twice as long as for the ordinary plates.

LEONARD F. — No; we do not publish a guide to photography. You will find in the numbers of the *Practical Photographer* most of the processes clearly expounded, including the development of negatives, after treatment of the negative and photographic retouching, in which you are specially interested. These numbers will be sent you on receipt of price, 25 cents per copy.

ANNA HOLMES. — You will find the printing-cut papers more desirable for the work which you purpose doing — the making of books of pictures — using the sensitive paper itself as leaves, as suggested in the Round Robin Guild. A blue-print book is not to be despised, especially if it is a book of marines. You may sensitize your own paper, using a heavier paper than that employed in the blue-print paper of commerce, and as the process is very simple and inexpensive, it would be a good idea to make your own blue-print paper.

F. D. J. — The glycerine-developed print you enclose is too smudgy. In some places the development has been carried too far and in others not quite far enough. Doubtless you use the solution too strong. Try diluting one-half and work up the head and the high lights first. I would not advise the making of gum prints until you are a little farther advanced in the practice of ordinary printing. You must learn what to take out of a picture when making gum prints.

E. H. CARY. — The local poisoning is due to the metol which you have been using. Better go to a physician and have him give you something to allay the irritation and also to prevent the spreading. Metol is very poisonous to some skins, but it is not at all alarming and is easily cured. Use rubber finger-tips when developing and avoid further trouble of this nature.

D. L. E. — Grams are often confusing when given in a formula instead of the familiar grains. Almost any arithmetic will give a table for transposing grams into grains. A gram is a trifle over 15 grains, and 30 grams is equal to 1 oz. and 25 grains.

BERTHA B. — A black stain for wood work of camera may be obtained of any large dealer in photographic supplies. If not found there, then try a paint shop and ask for a dead black stain for woodwork. It is applied very thin with a wide brush. Better take your camera to an expert and have the bellows patched rather than attempt the work yourself, especially if the leak is in a corner of one of the folds.

B. N. S. — The lead intensifier about which you ask is probably made of nitrate of lead and ferricyanide of potassium. Use equal parts of a ten per cent solution of the two chemicals, and add a few drops of acetic acid to the mixture.

CLARENCE S. — The prints which you enclose for criticism are well made as far as technique is concerned, and the mounting is done in an artistic manner. You will find, however, that if you attempt less ambitious subjects you will be more successful in your pictorial results. It is never wise to attempt to represent historical subjects or subjects from poetry or prose, unless you have a model who is accustomed to posing. Any one may wear a tricorne hat, but there are very few who would be transformed into a Napoleon by so doing.

E. R. Bolander, 116 South Tenth St., Richmond, Ind., wishes to buy a second-hand Brownie folding camera, and a Brownie developing machine. Address as above.

BERTRAM D. — One of the best ways for dissolving hypo for plates, or prints, is to tie the hypo crystals in a square of cheese cloth and pour boiling water over them. One thus avoids dirt and sediment in the solution; and if one is in a hurry, there is no danger of finding undissolved crystals in the bottom of the hypo tank. A small quantity of boiling water will dissolve quite a large quantity of hypo.

G. D. C. — The stains on the hands caused by the pyro developer are easily removed by washing the hands in water to which has been added a little oxalic acid in ten per cent solution. An ounce of the acid solution in 20 oz. of water will make it of sufficient strength.

The Crucible

TESTING WATER

In the February number of PHOTO-ERA we published in this department a series of directions for testing water for photographic purposes, and we wish here to supplement those directions with a few suggestions which we received some days since from the well-known analytical chemist, Reuben Haines of Philadelphia. Several of these tests are more certain of giving satisfactory results than the methods stated in the February issue.

1. In testing water for chlorides with silver nitrate in the way described the water should always first be made *distinctly acid* with pure nitric acid before adding the silver nitrate solution. Also since many pure natural waters show a faint cloudiness with silver nitrate it would be well to modify the direction to read that "a *decided* cloudiness or milkiness would show the water to be unsuitable."

2. In testing for sulphates with barium chloride the water should always be first acidified with pure hydrochloric acid, otherwise a precipitate may be formed when no sulphates except in traces are present in the water.

3. In testing for nitrates with ferrous sulphate (proto-sulphate of iron) solution, the test should be made as follows: —

Into a test tube of medium size pour the water to a depth of about one inch, incline the tube to about 45°, and pour *cautiously* and *slowly* down the sides an equal quantity of *strong* sulphuric acid of specific gravity about 1.80 so that it forms a layer below the water without mingling with it to much extent. There is no risk of accident in doing this if it is done slowly. *Cool the now heated* test tube in a glass of water and *when cold* add slowly a few drops of the saturated ferrous sulphate solution while inclining the test tube as before, or it may be added through a small glass tube curved at the lower end. Nitrates are indicated by a dark ring or layer between the acid and water. If no ring appears after a few minutes, shake the test tube *gently*, plunge at once in cold water, and observe again when cool. Heat destroys the color produced by the nitrate, hence the necessity to keep the tube cool. This is essentially the form of this test described in Fresenius' "Qualitative Chemical Analysis," edited by Professor Wells, 1897, page 387. I have found that if carefully performed this test will generally indicate as little as from 2 to 4 grains of nitric anhydride, N_2O_5, in one gallon of water. There are other tests for nitric acid in water far more delicate and more reliable than this old one, but it is still useful even to the analytical chemist as a quick rough test to find the approximate amount of nitric acid present in water. The one most generally used at the present time is known as the phenol-sulphonic acid test for nitrates. It is easily performed, rapid and as accurate in its most recent form as any known test for nitric acid, but it is perhaps more adapted to the laboratory than to the home worker.

4. Nessler solution for the ammonia test, when freshly prepared, should be allowed to stand for several hours until it has settled perfectly clear. It is then decanted, *not filtered*, into another perfectly clean bottle for use. Filter paper generally contains traces of ammonium salts sufficient to affect the test solution.

5. The starch iodide test for nitrates is only available in the absence of other substances which also produce the blue color by this test, viz., compounds of iron, etc. Fresenius recommends to distil the water with a little acetic acid before making the test.

It is of not much practical importance for the purpose of photography, since anything beyond traces are continually and quickly oxidized to nitric acid, except when a large excess of organic matter is present and the water would be shown

to be bad by the other tests. In water analysis for drinking purposes the importance of test for nitrites rests upon the belief that the presence of these compounds shows the organic matter in the water to be in a state of decomposition by fermentation or otherwise, which is considered a bad indication as regards health.

Very few chemists use the test for nitrates above mentioned for testing water since we have another exceedingly delicate test made with a substance prepared from coal tar products, known as Ilosvay's Test.

SPOTTING MEDIUM

THE best medium for filling pinholes in negatives after development is made of a mixture of carmine, ultramarine and sepia in gum arabic water, varying the proportions so as to match as nearly as possible the color of the negative when looked through. A fine-pointed brush should be used, almost dry, and very little of the color taken at a time. Care must be exercised not to pass the edges of the spots, but to apply the color as in stippling.

BROWN TONES ON BLUE-PRINT PAPER

To turn blue-prints to brown, wash and dry the print, then place it in a solution of ammonia made of 1½ oz. of stronger ammonia and 12 oz. of water until it has nearly lost its color. Rinse and place in a solution of tannic acid 154 grains and water 7½ oz. Leave in this bath until the required color is secured, then wash thoroughly and dry.

A NEW PROCESS OF COPPER TONING

A NEW process of copper toning for bromide prints is being used quite successfully in England. The print is first bleached in a solution of 120 grains of potassium ferricyanide, 30 grains of potassium bromide and 20 oz. of water. It is then washed for ten minutes and placed in a solution of Schlippe's salt, 120 grains to 10 oz. of water. The print is then placed in a weak solution of ammonia, 1 drachm to 20 oz. of water, and afterwards washed in water to remove the ammonia. (Without the washing in weak ammonia the whites would be degraded.) A stock solution of 1 oz. of copper sulphate in 9 oz. of water is made. To half an ounce of this half an ounce of ten per cent hydrochloric acid and 40 oz. of water are added, the print is then toned in this, stopping when the desired tint is reached. It is afterwards fixed in hypo and again washed.

TO DETERMINE THE CHIEF REAGENTS IN A DEVELOPER

IT may be of use to the non-chemist worker in the dark room sometimes to know of a simple test or two by which to recognize the main constituent in a developer, or the developing agent in a solution.

A few simple tests for the chief reagents are as follows: —

Pyro. — Nitric acid gives a deep red color. Ferric chloride gives a blue, becoming brown. Ferrous sulphate gives no reaction. Ferricyanide of potash gives deep red.

Hydroquinone. — Nitric acid gives dark red, changing to yellow if in excess. Ferric chloride gives dark brown, gradually becoming paler. Ferrous sulphate gives light yellow. Ferricyanide of potash gives no reaction.

Metol. — Nitric acid gives deep red, gradually becoming light yellow. Ferric chloride gives deep red brown. Ferrous sulphate gives nothing. Ferricyanide of potash gives dark reddish yellow.

Eikonogen. — Nitric acid gives reddish color. Ferric chloride gives reddish brown. Ferrous sulphate gives violet-red color if alkaline. Ferricyanide of potash gives nothing.

Glycin. — Nitric acid gives yellowish red color. Ferric chloride gives reddish brown, becoming green and then violet. Ferrous sulphate gives nothing. Ferricyanide of potash gives light yellow color.

Pyrocatechin. — Nitric acid gives reddish yellow color. Ferric chloride gives deep green color. Ferrous sulphate, if floated where solutions meet, gives a crimson ring. Ferricyanide of potash gives nothing. — *The Photog. News.*

The Filter

JUST AS WELL

THE artist painted a picture — a study on reptile life —
And proud of his work, he took it in to show the snake to his wife.
Looking it over, she tried to guess the subject he'd done with vim;
But, "I can't make head or tail of it, dear," frankly she said to him.

"Head or tail?" he repeated. "Neither of these can you see?
It's evident, then, I haven't done well — for that's all a snake should be."
Whereon he turned it sideways, and putting in shadows gray,
He named it again, "The Country Road," and sold it the very next day.—*Judge.*

A BAD BREATH

IN far-off Lahore it is the opinion that the best way to treat a heckler at a political meeting is undoubtedly to humor him, not in the sense of tempting him to continue his pursuit, but in that of reducing him to silence by a witty sally, a course that rarely fails to find favor with the other members of the audience. For instance, when the late Sir Henry Havelock-Allen was subjected to incivility by a "cowardly and despicable rotten egg heckler" he blandly mopped his face and fixing his eyes on the spot whence the almost winged messenger had been thrown, calmly remarked —

"I say, my friend, the hen that laid that egg had a very bad breath."

HEART DISEASE

"The trouble with you," the doctor said after examining the young man, "seems to be that something is the matter with your heart."

"With my heart?"

"Yes. To give it a name, it is angina pectoris."

"Guess again, doc," said the young man. "That isn't her name at all."

HANDED OUT HOT

IN a certain college a student greatly annoyed the professor of natural sciences by asking frequent and foolish questions. One day, after he had interrupted the lecturer several times with irrelevant remarks and questions, he asked, "Professor, how long can an animal live without brains?"

"Well," was the professor's reply, "I really don't know, Mr. Blank. How old are you?"

CANDOR

"GOOD gracious!" exclaimed the mint sauce, "I should think you'd be ashamed to masquerade as 'spring lamb.'"

"Well," replied the roast," it does make me feel rather sheepish." — *Catholic Standard and Times.*

GREASE VS. GRAVITY

DR. ARTHUR WILLIAM WHITE, professor of experimental physics at Yale University, delights in telling his experience with an inventor of the unlettered "genius type," who came to the professor with a model of a perpetual-motion machine.

"H'm, looks plausible," observed the doctor, "but it won't work. What are you going to do about gravity?"

"Gravity!" said the visitor, scornfully, "t' 'ell wit' gravity; we'll use plenty o' grease." — *Everybody.*

SECRETS

"OH, ne-ver tell your se-crets to
The fish, what-ever else you do;
For fish-es carry tails, you know,
And they might tell on you!"

A MOTHER'S HOPES

The Fond Mother.—"Be sure to take his picture with his hand to his head. He always sits that way, the little dear. We all think he will be an actor or a novelist some day."

THE OLD WAY AND THE NEW
MRS. J. S. HATHAWAY, HER HORSE
AND WHITE STEAM CAR

NOTES AND NEWS

THE Pennsylvania Academy of the Fine Arts held an exhibition of photographs arranged by the Photo-Secession, from April 30 to May 27, 1906. The pictures in this exhibition were, with very few exceptions, chosen from those which were hung in a series of exhibitions at the Photo-Secession Galleries in New York during the present season. They summarized, in a broad way, the trend of that international movement of which the Photo-Secession is the organized American exponent, a protest against the conventional conception of what constitutes pictorial photography. This complete surrender on the part of the Pennsylvania Academy of the Fine Arts is another acknowledgment of the absolute right of pictorial photography to an honored place amongst the fine arts. We understand, furthermore, the Academy of Arts at St. Louis also has requested the Photo-Secession to exhibit there in December.

AT a well-attended regular meeting of the Wisconsin Camera Club, April 25, the members and a number of visitors enjoyed an interesting and instructive lecture on lenses by S. Lawrence of the Bausch & Lomb Optical Company. Following this a flashlight demonstration was given by A. Gundelach and the array of cameras leveled at the group taken was awe-inspiring. The plates were immediately developed and most of the members presented with prints before the close of the meeting. This was the first meeting of Milwaukee's new camera club in their new quarters and a number of new names were added to the roster. Milwaukee amateurs have responded generously to the untiring efforts of the club's press agent and it is expected that the membership will reach the one hundredth mark before the first meeting in May. The chairman of the print committee announced a print competition which opened May 1, and closed May 25, a number of prizes having been donated by Milwaukee dealers.

Secretaries of other similar organizations are requested to enter into correspondence with Mr. Bernard C. Roloff, 810 Pabst Building, Milwaukee, Corresponding Secretary, with a view towards securing an exchange of courtesies for the members. This is especially desirable in view of the well-known reputation of Milwaukee as a Convention City—a reputation which our "Greater Milwaukee" Association is endeavoring to augment during the present year.

A VERY successful exhibit was held by the Akron Camera Club April 14 to 21 inclusive, at the art rooms of M. O'Neil & Co. Ninety-eight prints of a high order of excellence were shown, the exhibits of John W. Schuler, H. W. Minns, George F. Kunz and William Spanton being especially commendable. The eighth annual exhibition reflects great credit upon the club, which is in a fairly prosperous condition and has a membership of about twenty-five. A movement is now on foot to materially increase the membership, and in this the PHOTO-ERA wishes the club all success.

NATIONAL RELIEF FUND FOR CALIFORNIA PHOTOGRAPHERS

AT a meeting in Boston, May 6, 1906, of the California Photographers Relief Fund Committee, which was inaugurated in New York, April 20, and the National Relief Association for California Photographers, which was started in Boston, April 27, it was resolved and decided that the two committees should act jointly under the title of the National Relief Fund for California Photographers, and that no photographer in this country who has the interest of his suffering California Brothers at heart need hesitate to give what he can to either source of appeal, or to both, for the final distribution will be made by the joint committee, to the end that every dollar will go honestly and with strict business care and watch-

fulness where it is most deserved and needed. As this union of committees is of a national character, all other committees of the country are invited to send their contributions to either Treasurer, Joseph Byron, Treasurer, 53 West 32d St., New York, N. Y., or Frank R. Barrows, Treasurer, 1863 Dorchester Ave., Boston, Mass.

New York Committee: B. J. Falk, Theodore C. Marceau, E. B. Core, Pirie MacDonald, J. G. Gessford, A. F. Bradley, F. E. Baker, Curtis Bell, Secretary, Jos. Byron, Treasurer.

Boston Committee: W. H. Partridge, M. B. Parkinson, Jo Di Nunzio, H. D. Haight, C. W. Hearn, Will Armstrong, Secretary, Frank R. Barrows, Treasurer.

THE Piety Corner Club of Waltham held an exhibition of photographs by members and their friends during the second week of May. While the attempts of the exhibitors were along modest lines, there was in evidence considerable taste in selection and no shortcomings of a very serious nature. This movement among the members of the Piety Corner Club is entirely unpretentious, yet of a healthy and spontaneous character, founded upon intelligent enthusiasm, that promises much for the future. We predict a marked improvement in its work and anticipate with confidence the next display of prints. The two prizes for the best exhibits of equal merit were awarded to Mr. Edmund L. Sanderson and Mr. F. G. Stickney, both of Waltham. The latter represented the non-members.

AN aid to vision is of inestimable value to the sportsman, traveler, ranchman and persons engaged in many kinds of business. The modern prismatic binocular is so far superior to the antiquated field glass that comparison not only demonstrates the inefficiency of the latter, but shows the progress made in optical science of which this invention is but one example.

If interested, the Gundlach-Manhattan Optical Co., Rochester, N. Y., will be pleased to send you a booklet giving an instructive description of the Turner-Reich binoculars.

THE Anthony and Scovill Co's catalogue for 1906 is an exquisite production; its cover, the work of the well-known artist, Harrison Fisher, alone is worth preserving and serves as a fitting invitation to peruse its contents in search of the great possibilities of amateur photography and of Ansco, its mechanical handmaid. Nor is the reader disappointed; the catalogue contains a wealth of interesting matter for the amateur, who will do well to get a copy of his local dealer or direct from the firm at Binghamton, N. Y.

In order that none of our readers may be led astray, we desire herewith to rectify several errors which we regret were made in naming some of the flowers which were reproduced in our May issue. The foam flower, on page 293, is in reality the bishop's cap or miterwort (*mitella diphylla*). It is possible, however, that foam flower is a popular name in some localities. The pretty white blossoms on page 296 are not anemones but flowers of somewhat similar appearance called blood-root (*sanguinaria canadensis*), also known as puccoon or tetterwort. On page 302 our printer made mayweed blossoms read "milkweed blossoms." The mayweed is, we believe, a plant very similar to what several well-known botanists state that our cut represents; namely, the common, wild New England aster which blooms toward autumn. A very pleasing spray of peach blossoms on page 317 was incorrectly called "apple blossoms," while the narcissuses on page 319 were misnamed "jonquils." The geranium on page 323 is not that known as the "ivy-leaf," which has smooth glossy leaves, but is the wild geranium or crane's bill (*geranium maculatum.*)

Probably the most important achievement of the Anthony and Scovill Co. is the Ansco-Vidil Film System. The Ansco-Vidil films are daylight-loading cartridge films, but packed in a new and special manner, possessing many great advantages over the ordinary form of roll film. Every film bears the trade-mark. In selecting a folding camera of whatever style or make, the purchaser should give special attention to the Ansco-Vidil Film System and should be careful to ascertain whether the new camera he is purchasing will take the Ansco-Vidil spools; for this new system offers so many advantages that it is bound to supersede, to a great extent, all other systems of photography.

A spool of Ansco-Vidil film has before the first film and between every succeeding film, a focusing screen, consisting of a tough semi-transparent parchment paper, enabling the photographer to focus accurately before each exposure, and answers the same purpose as a ground glass screen, with the decided advantage that after focusing it is only necessary to turn the winding key to bring the film into position. There is therefore no shaking of the camera or shifting of the focus, as it happens with a dry plate camera in which it is necessary to insert the plate-holder in front of the ground glass after focusing.

Exact focusing when using roll film has heretofore been impossible, but the Ansco-Vidil film has solved the problem. With this film one can see the image full size of the film, before exposure, which is a decided advantage over the ordinary small view finder.

It takes a bold business man to leave the rush and whirl of Broadway for the comparative quiet of a side street, but very often it is a move dictated by wise foresight. The Obrig Camera Company, which for eighteen years has been located at or near 165 Broadway, has been compelled to move by the ever active real estate operations that are going on in its district. The tallest building in the world is soon to be erected on its present store and so, with the first of May, the Obrig people were obliged to vacate and have moved with their photographic Lares and Penates to their new store at 147 Fulton St., just a few yards east of Broadway. There, three floors are at their disposal, and with splendid show windows — something that they have had to do without at their old place — they ought to be able to attract much new business. It goes without saying that their old customers will follow them to Fulton St., and we wish the firm much prosperity and increased business.

We have just received from the Bausch and Lomb Optical Co., Rochester, N. Y., a booklet on anastigmat lenses in general and Bausch and Lomb-Zeiss lenses in particular, which would prove of value and interest to any one who contemplates the purchase of a high-grade instrument. The characteristics and advantages of the four lenses treated in the booklet may be summed up briefly as follows: —

The Unar has the greatest speed and hence is necessarily larger than slower lenses with which it might be compared. Its speed adapts it to the most rapid snapshots, instantaneous work of all kinds, portrait and groups, and it gives full exposure under unfavorable conditions, when lenses of less speed would fail. With reduced aperture (diaphragm or stop) and therefore lessened speed, it is well suited to landscape work as well as the purposes of the other lenses. It has, therefore, the value of other lenses with the additional advantage of speed.

The Tessar is the lightest and most compact of the lenses. It is slower than the Unar, but twice as fast as the ordinary camera lens. It possesses remarkable definition and covering power which render its use particularly advantageous on large plates and for enlargements.

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Zeiss Tessar

THIS, the latest of the famous Bausch & Lomb-Zeiss lenses, is now furnished by the makers on Kodaks, Premos, Centuries, Hawk-eyes and other hand cameras. This lens is more than twice as fast as the ordinary camera lens, and the optical corrections are of the highest order. Home portraiture, the most rapid instantaneous photographs, landscapes, architecture, interiors are all in the range of **Tessar** work. It pays to have a lens that you can always depend on to get results.

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The Plastigmat is not quite so rapid as Tessar, ⅓ less, and it is not so light. It has, however, the advantage that its rear combination can be used. Where the single combinations of the convertible Protars have a speed of f.12.5, those of the Plastigmat work at f.13.5, a speed somewhat less but still ample for instantaneous exposures under normal conditions.

PRACTICAL NOTES ON PHOTOGRAPHY. Elbert C. Smith. Brooklyn *Daily Eagle*, 1905.

This interesting book of 156 pages is not intended as a complete treatise on photography, but, as its name implies, is a collection of useful, practical suggestions for the average worker. The beginner will find simple guidance and instruction, while for the advanced amateur there are new methods and processes which require more skill and manipulation. There are articles covering a large portion of the whole field of photography; and the illustrations, which are contributed by well-known amateur artists, are of fine quality and show some of the many possibilities of photography.

MOUNTING AND FRAMING PICTURES. Paul N. Hasluck. Cassell and Company, New York. 40 cents.

This book of 160 pages and 240 engravings treats in a comprehensive manner the practical as well as the art side of a subject which interests all photographers — a subject worthy of much careful thought and study. In this volume the reader will find many suggestions for unusual and original treatment.

PHOTOGRAPHERS who are preparing for their summer outings should not fail to provide themselves with shoes equipped with O'Sullivan Rubber Heels, as one of the most essential parts of their outfit. Those who have the intention of taking walking trips loaded with a camera and supplies will find that the labor of tramping is materially reduced by the resilient heel cushions. For climbing, especially when the rocks are wet or icy, the clinging heels give a valuable sense of security, and materially reduce the danger of slipping. For treading the wet decks of yachts they are indispensable, while in golfing they halve the exertion and double the pleasure. In short, they are necessary for every one who desires to live outdoors in the summer, and we advise their use by every reader.

FROM Palo Alto, Cal., we have received the 1906 catalogue of the California College of Photography, the only college of its kind west of the Rocky Mountains. Fully equipped in every respect and conducted by men who have devoted their lives to the study and advancement of portrait photography, this college offers a complete course of instruction, at moderate rates, which cannot be equaled in a professional studio or excelled by any other college of its kind.

TRUTH DEXTER. Sidney McCall. Little, Brown & Co., Boston. $1.50.

A new illustrated edition of this fascinating story has just been received. The execution and design of the volume are of a high standard of excellence and the edition merits a large sale among book-lovers. The eight full-page illustrations by Alice Barber Stephens will be well worth the study of any of our readers who are interested in book illustration with the camera. The work shows this famous illustrator at her best. The story itself has already taken its place in the front rank of popular fiction and needs no comment here.

DIE PHOTOGRAPHISCHE KUNST IM JAHRE 1905, fourth annual edition, edited by F. Matthies-Masuren and published by Wilhelm Knapp, Halle a. S. Germany. Full folio. Price, 8 Marks; cloth, 9 Marks.

The publication of photographic annuals of recent years seems to have developed into a friendly rivalry, each appearing to wish to eclipse the other in general excellence. While all are splendid examples of the book-makers' art and have made a successful appeal in behalf of photography as one of the fine arts, they have been surpassed as a whole by the German publication, *The Photographic Art during* 1905, the masterpiece of Wilhelm Knapp in this branch of bookmaking. The text speaks for itself, containing, as it does, the following-named papers: "A Summary of the Photographic Art during 1905," by the editor; "Photography and the Training of the Eye," George Fuchs, of Munich; "The Shape of the Print," Otto Ewel, of Dresden; "Photography and Culture — a Suggestion for the Founding of a Photographic Museum," Ernst Schur, of Charlottenburg; "Indispensable Requirements of Photography in Comparison with the Development of Painting," Dr. Friedrich Castanjen, of Berlin; "Concerning the Condition of Artistic Activity," Camillo Carl Schneider, of Vienna; "The Development of Photography in the United States of America," H. Schnauss, of Dresden; "Symbolism and the Limitations of Photography," Dr. Fritz Knapp, of Berlin; "A Few English Art Photographs," E. O. Hoppe, of London; "The Exhibitions of the Year." These articles are written by men of rare intellectual ability and technical experience, and will repay careful perusal by every worker familiar with German. The illustrations, while numerous, have been selected with fine discrimination and make a strong appeal to lovers of the pictorial. One recognizes several old acquaintances, but that is to be expected in a work of this character — a circumstance which may have stimulated the unusual excellence of the reproduction, be it engraving or half-tone. There are about one hundred and fifty large-sized half-tones, printed with the text, and seventeen inserts, mostly photogravures. The *pièce de résistance* is the 6 x 12 inch half-tone, by C. Angerer and Göschl, of a superbly framed three-panel picture, entitled, "Nachhall" (Echo), by P. Pichier, of Vienna. The conception and treatment of each panel, with the picturesque and decorative surroundings, are extremely pleasing and show considerable originality. This and the general effect of the group seems to indicate that the artist has studied with profit the masterly style of Hans Makart. The technical work of C. Angerer and Göschl is a triumph of half-tone engraving and may be studied with advantage by all who are interested in the process. Among the eminent workers, whose artistic ability is well exemplified in *Die Photographische Kunst*, are the leaders of every photographic school, America being particularly well represented. From the pictorial standpoint alone, this work deserves to be classed among the most important contributions to photographic literature ever published, and a copy should be in the possession of every earnest worker in the world. In view of the great expense in accumulating such a large amount of valuable material and publishing it in such a splendid manner, the price asked for the volume seems trifling.

THE New York *Sun*, which nearly always hits the nail on the head, is to be commended for making the following timely observation:—

"The lens of the camera never lies. It tells all the truth that the honest sunlight communicates to it. The liar is the man with the brush or pencil who goes at the honest negative in the service of the dishonest newspaper. We are referring now to the batch of 'first photographs' of the San Francisco disaster."

GOERZ TALK

Number THREE

In Theory

The speed of a lens depends solely on the ratio between the focal length of the lens and its diaphragm aperture, yet

In Practice

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Because of its superior finish, its perfect workmanship and the scientific correction of its design.

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GOERZ LENSES will yield at will wonderfully soft effect or microscopically sharp engraving-like definition, with an evenness of illumination, a brilliancy of image without par. They are the standard anastigmats by which other lenses are compared and valued.

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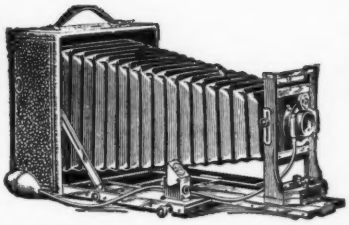

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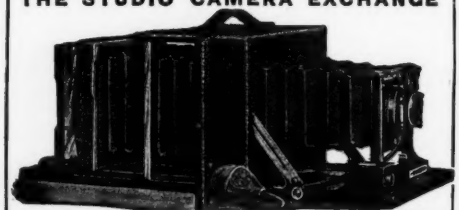

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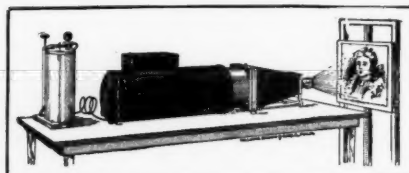

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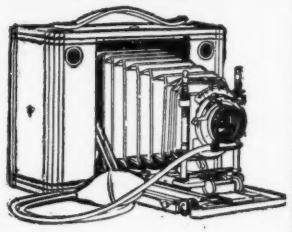

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PREVENTING DECEPTION.

A recent number of the *Camera* contains a most instructive article on Development with particular reference to the development of over exposures. The substance being as follows :

As a basis for demonstration four plates were exposed upon the same subject, eight times the correct exposure being given.

Plate No. 1 was developed in the ordinary way, that is, when it *appeared* sufficiently dense development was stopped and the plate fixed—the result being a weak, thin negative.

Plate No. 2 was developed with bromide added to the developer as soon as over exposure was evidenced. The duration of development being determined by visual examination as for Plate No. 1.

Result. The negative precisely like No. 1.

The addition of Bromide having absolutely no effect except to make development slower.

Plate No. 3 was developed with Bromide added before development. This negative proved to have a fair degree of contrast and demonstrating that Bromide is an advantage if *added to the developer before development has commenced.*

Plate No. 4 was developed according to the factorial or time development method. At the expiration of the required time the plate was removed and fixed, the negative affording good contrast and brilliancy, and in every way *as good as if the plate had received only normal exposure.*

The writer very pertinently remarks that Plate No. 3 must be ruled out, as we can seldom, if ever, add Bromide before development owing to our not knowing whether the plate had been over exposed or not.

As to density, negatives Nos. 1 and 2 print in five seconds. Negative No. 3 in ten seconds, negative No. 4 in thirty seconds, proving conclusively that the time of exposure only affects density and not contrast.

In concluding, the writer states that "Time development is *correct* to give proper representation of the lights and shadows *whatever the exposure.*"

"*Time development simply prevents appearances from deceiving us*, and enables us to afford the film the proper *amount of development, no matter how dense or thin the negative may look in the dark-room.*"

Time or factorial development is the fundamental principle of the Kodak Tank Developer.

Error either way from the correct or normal exposure is taken care of by the extreme latitude of Kodak Film and the proper time for development and exact formula for developer have been figured out by the manufacturers, absolutely ensuring the user the highest possible percentage of good results, to say nothing of the immense advantage of performing the entire operation of picture making in good wholesome daylight.

WHAT'S THE USE.

Some of us started Kodaking a good many years ago using the old style Kodak making the little round picture, perhaps at first "they did the rest", but after a while we tried it—not with great success, as albumen paper was quite a proposition for an amateur.

Then came Solio and daylight loading. We thought the Millenium had arrived — making pictures was too easy. Then just as we became accustomed to such luxuries along came Velox—another tradition shattered, now we could make pictures by any light, and so rapidly that we overtimed every print, not being able to realize at first that prints could now be made in as many seconds by

Eastman Kodak Company
ROCHESTER, N. Y., *The Kodak City.*

gaslight as it took minutes of daylight the old way.

So it went from bad to worse; every time you picked up a magazine Eastman had something new; if you couldn't make prints in the daytime, make them at night; if you didn't like black and white prints Eastman had a paper that would yield browns, olive greens, sepias, etc.; if you grew lazy or thought you couldn't carry the camera and your gun also, out came the Folding Pocket Kodak — you hadn't an excuse, simply had to go on Kodaking.

Now you don't even need a dark room for developing—don't even need to turn a handle—just pop the films in a tank, sit down and be comfortable.

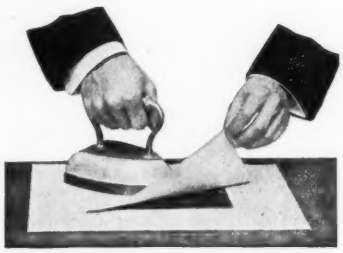
What's the use—every time you would invent an excuse for retirement out comes something new and good from the Kodak City—you just simply have to keep at it—and deep down in your heart you wouldn't quit Kodaking if someone paid you for it.

SEPIA TONES.

Velox paper long ago established itself firmly in the good graces of the photographer, the variety of surfaces and grades affording him a medium of expression unequalled by any other paper, to say nothing of its convenience and time saving qualities. For some subjects the regular black and white tones did not suffice and the amateur resorted to more or less non-permanent and troublesome methods to produce prints warm in tone.

The use of Velox Re-Developer affords the ideal method of producing Sepia toned prints, absolutely permanent, uniform in tone and without unsatisfactory delay as by this method a Velox print can be turned Sepia in two minutes and at the nominal cost of fifty cents for three hundred four by five prints.

Just Press it with a hot iron.



Kodak Dry Mounting Tissue

INSURES ABSOLUTE CONTACT WITHOUT CURL EVEN ON THE THINNEST MOUNTS.

All Dealers.

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A New KODAK for 4¼ x 6½ Pictures.

The No. 4A Folding Kodak follows the lines of the immensely popular 3A Folding Pocket Kodak and is intended to meet the demand of photographers who fully appreciate the supremacy of the Kodak for serious work. The pictorialist has often experienced difficulty in making his picture come properly within the arbitrary confines of some of the regular sizes of films and plates, finding it necessary to photograph the image on a scale smaller than desired and then trimming down the print in order to perfect his composition.

In the 4A Folding Kodak the size of the picture has been increased to 4¼ x 6½ inches, an ideal size from the pictorial stand-point, and one that enables the picture maker to record the image on the largest possible scale without detriment to the composition. The optical equipment is one of the strongest features of the 4A, the lenses and shutter being such as are ordinarily furnished with the highest grade 5 x 7 camera, ensuring speed, covering power and correct perspective.

The lens of the regular equipment is a double combination Rapid Rectilinear, 8½ inch focus, fitted to the No. 2 Bausch and Lomb Automatic Shutter. The rising and sliding front, automatic focusing lock and the extension focusing scale, are immensely practical and convenient and do much to increase the simplicity in manipulation and accuracy of results.

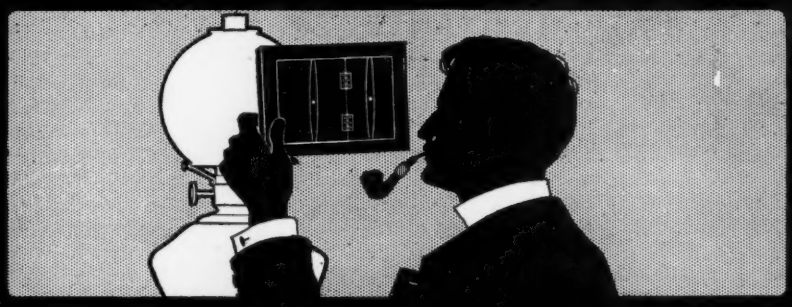
With the Kodak Portrait Attachment and extension focusing scale the camera can be operated up to 3½ feet, thus permitting portraits of a size limited only by the size of the film. By means of an adapter, instantly attached glass plates may be used when desired.

A brilliant reversible finder, spirit level and tripod sockets for both horizontal and vertical pictures round out the remarkably complete equipment.

Notwithstanding the large size pictures made with this instrument, the word Pocket could with but a slight stretch of the imagination have been included in its name as when closed it measured but 2⅝ inches in thickness by 11 inches in length.

The Price.

No. 4A Folding Kodak, pictures 4¼ x 6½ - -	$ 35 00
Do., with Volute Shutter and B. & L. Zeiss Tessar Lens, Series II. B No. 6 *f.* 6.3 - - - - - - - -	100 00
N. C. Film Cartridge, 6 exposures, - - - - -	65



A good negative is worthy of a good paper. A poor negative needs it. There's a

VELOX

FOR EVERY NEGATIVE

Two speeds, two weights and five surfaces.

NEPERA DIVISION,

Eastman Kodak Company,

ROCHESTER, NEW YORK.